6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL-]

RIN 2060-AH41

National Emission Standards for Hazardous Air Pollutants: Site Remediation

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: This action proposes National Emission Standards for Hazardous Air Pollutants (NESHAP) under the authority of section 112 of the Clean Air Act (CAA) for the site remediation source category. The EPA has determined that site remediation activities can be major sources of organic hazardous air pollutants (HAP) (including benzene, ethyl benzene, toluene, vinyl chloride, xylenes) and other volatile organic compounds (VOC). The range of potential human health effects associated with exposure to these organic HAP and VOC include cancer, aplastic anemia, upper respiratory tract irritation, liver damage, and neurotoxic effects (e.g., headache, dizziness, nausea, tremors). The proposed rule would implement section 112(d) of the CAA by requiring those affected site remediation activities to meet emissions

limitations, operating limit, and work practice standards reflecting the application of the maximum achievable control technology (MACT). When implemented, we estimate that the proposed rule would reduce annual regulated HAP emissions from the source category by approximately 50 percent or 570 megagrams per year (Mg/yr) (630 tons per year (tpy)) and reduce nationwide VOC emissions by 3,680 Mg/yr (4,050 tpy).

DATES: Comments. Submit comments on or before [INSERT DATE 60 DAYS AFTER PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER].

Public Hearing. If anyone contacts the EPA requesting to speak at a public hearing by [INSERT DATE 20 DAYS AFTER PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER], a public hearing will be held on [INSERT DATE 28 DAYS AFTER PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER].

ADDRESSES: Comments. By U.S. Postal Service, send comments (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102), Attention Docket Number A-99-20, U.S. EPA, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. In person or by courier, deliver comments (in duplicate if possible) to:

Air and Radiation Docket and Information Center (6102), Attention Docket Number A-99-20, U.S. EPA, 401 M Street, SW, Washington, D.C. 20460. The EPA requests that a separate copy also be sent to the contact person listed below (see FOR FURTHER INFORMATION CONTACT).

Public Hearing. If a public hearing is held, it will be begin at 10:00 a.m. and will be held at the new EPA facility complex in Research Triangle Park, North Carolina, or at an alternate site nearby. You should contact Ms. JoLynn Collins, Waste and Chemical Processes Group, Emission Standards Division, U.S. EPA (C439-03), Research Triangle Park, NC 27711, telephone (919) 541-5671 to request a public hearing, to request to speak at a public hearing, or to find out if a hearing will be held.

Docket. Docket No. A-99-20 contains supporting information used in developing the standards. The docket is located at the U.S. EPA, 401 M Street, SW, Washington, DC 20460, in Room M-1500, Waterside Mall (ground floor), and may be inspected from 8:30 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays. Copies of docket materials may be obtained by request from the Air Docket by calling (202) 260-7548. A reasonable fee may

be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: Mr. Greg Nizich, Waste and Chemical Processes Group, Emission Standards Division (C439-03), U.S. EPA, Research Triangle Park, NC 27711, telephone number (919) 541-3078, facsimile number (919) 541-0246, electronic mail address "nizich.greg@epa.gov".

SUPPLEMENTARY INFORMATION:

Comments. Comments and data may be submitted by electronic mail (e-mail) to: "a-and-r-docket@epa.gov." Electronic comments must be submitted as an ASCII file to avoid the use of special characters and encryption problems. Comments will also be accepted on disks in WordPerfect® file format. All comments and data submitted in electronic form must note the docket number: A-99-20. No confidential business information (CBI) should be submitted by e-mail. Electronic comments may be filed online at many Federal Depository libraries.

Commenters wishing to submit proprietary information for consideration must clearly distinguish such information from other comments and clearly label it as CBI. Send submissions containing such proprietary information directly to the following address, and not to the public docket, to ensure that proprietary information

is not inadvertently placed in the docket: Attention Mr. Greg Nizich, c/o OAQPS Document Control Officer, U.S. EPA (C404-02), RTP, NC 27711.

The EPA will disclose information identified as CBI only to the extent allowed by the procedures set forth in 40 CFR part 2. If no claim of confidentiality accompanies a submission when it is received by the EPA, the information may be made available to the public without further notice to the commenter.

Public Hearing. Persons interested in presenting oral testimony or inquiring whether a hearing is to be held should contact Ms. JoLynn Collins of the EPA at (919) 541-5671 at least 2 days before the public hearing. Persons interested in attending the public hearing must also call Ms. Collins to verify the time, date, and location of the hearing. The public hearing will provide interested parties the opportunity to present data, views, or arguments concerning the proposed standards.

Docket. The docket is an organized and complete file of all the information considered by the EPA in the development of the proposed rule. The docket is a dynamic file because material is added throughout the rulemaking process. The docketing system is intended to

allow members of the public and potentially affected industries to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket will serve as the record in the case of judicial review. (See section 307(d)(7)(A) of the CAA.) The regulatory text and other materials related to the proposed rule are available for review in the docket, or copies may be mailed on request from the Air Docket by calling (202) 260-7548. A reasonable fee may be charged for copying docket materials.

Worldwide Web (WWW). In addition to being available in the docket, an electronic copy of the proposed rule is also available on the WWW through the Technology Transfer Network (TTN). Following signature, a copy of the proposed rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at the following address: http://www.epa.gov/ttn/oarpg. The TTN provides information and technology exchange in various areas of air pollution control. If more information regarding the TTN is needed, call the TTN HELP line at (919) 541-5384.

Background Information. The background information for the proposed rule is not contained in a formal background information document. Background information we used in developing the proposed rule is presented in technical memoranda that we have included in Docket No. A-99-20.

Regulated Entities. Categories and entities potentially regulated by this action include:

Category	NAICS*	Examples of regulated entities
Industry	325211 325192 325188 32411 49311 49319 48611 42269 42271	Site remediation activities at businesses at which organic materials currently are or have been in the past stored, processed, treated, or otherwise managed at the facility. These facilities include: organic liquid storage terminals, petroleum refineries, chemical manufacturing facilities, and other manufacturing facilities with collocated site remediation activities.
Federal Government		Federal agency facilities that conduct site remediation activities.

* North American Industry Classification System (NAICS) code. Representative industrial codes at which site remediation activities have been or are currently conducted at some but not all facilities under a given code. The list is not necessarily comprehensive as to the types of facilities at which a site remediation cleanup may potentially be required either now or in the future.

This table is not intended to be exhaustive, but

rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that we are now aware could potentially be regulated by this action.

A comprehensive list of North American Industry Classification System (NAICS) codes cannot be compiled for businesses or facilities potentially regulated by the proposed rule due to the nature of activities regulated by the source category. The industrial code alone for a given facility does not determine whether the facility is or is not potentially subject to the proposed rule. The proposed rule may be applicable to any type of business or facility at which a site remediation is conducted to clean up media contaminated with organic HAP and other hazardous material. Thus, for many businesses and facilities subject to the proposed rule, the regulated sources (i.e., the site remediation activities) are not the predominant activity, process, operation, or service conducted at the facility. In these cases, the industrial code indicates a primary product produced or service provided at the facility rather than the presence of a site remediation performed to support the predominant function of the facility. For example, NAICS

code classifications where site remediation activities are currently being performed at some but not all facilities include, but are not limited to, petroleum refineries (NAICS code 32411), industrial organic chemical manufacturing (NAICS code 3251xx) and plastic materials and synthetics manufacturing (NAICS code 3252xx). However, we are also aware of site remediation activities potentially subject to the proposed rule being performed at facilities listed under NAICS codes for refuse systems, waste management, business services, miscellaneous services, and nonclassifiable.

To determine whether your facility is regulated by the action, you should carefully examine the applicability criteria in the proposed rule. If you have questions regarding the applicability of the proposed rule to a particular entity, consult the person listed in the preceding FOR FURTHER INFORMATION CONTACT section of this document.

Outline. The following outline is provided to assist you in reading this preamble.

I. Background

A. What is the source of authority for development of the proposed rule?

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. The category of major sources covered by today's proposed rule was listed on July 16, 1992 (57 FR 31576). Major sources of HAP are defined by section 112 of the CAA to be those sources that emit or have the potential to emit at least 10 tpy of any single HAP or 25 tpy of any combination of HAP.

As a supplement to the list of source categories published on July 16, 1992, the EPA developed the publication entitled “Documentation of Developing the Initial Source Category List” (EPA-450/3-91-030, July 1992). This document contains descriptions of the types of activities included within each source category of major sources. This document states that future information may be used to refine the source category descriptions (EPA-450/3-91-030, page A-2).

We included site remediation on the NESHAP source category list to address HAP emissions from technologies and work practices used to clean up or reduce chemical contamination in soils, groundwater, other types of contaminated media and other materials at those facilities that are major sources of HAP as defined by section 112(a)(1) of the CAA.

During the initial development of the proposed rule, we obtained additional information regarding the cleanup of contamination from leaking underground storage tanks at those facilities that are not associated with industrial or manufacturing facilities and where the predominant, if not only, potential source of HAP emissions is the remediation cleanup activity itself

(e.g., cleanup of contaminated soil or groundwater due to a leaking underground tank at a small commercial business, farm, or private residence). Our analysis shows that the HAP emissions from a typical cleanup of contamination from the size and types of underground tanks commonly used at these facilities to store motor fuels or heating oils is significantly below the major source levels (i.e., 10 tpy of a single HAP or 25 tpy of all HAP) (see docket A-99-20). Therefore, we plan to modify our initial description for the site remediation source category to exclude remediation activities at residential and farm sites, and from leaking underground storage tanks located at gasoline service stations (businesses typically associated with NAICS codes 447110 and 447190). The source category description will be revised at the next update of the source category list as required under CAA section 112(c).

B. What is a site remediation?

A site remediation is performed in response to the release of hazardous substances into the environment (e.g., soil, groundwater, or other environmental media). It involves taking appropriate action to remove, store, treat, and/or dispose of the hazardous substances to the

extent necessary to protect human health and the environment. The term “cleanup” generally refers to the activities performed to address the hazardous substance contamination. This term frequently is used interchangeably with the term “remediation.”

Site remediations can be performed to address hazardous substance contamination resulting from either past or current human activities. Examples of such activities include accidental releases of chemical substances; undetected leaks in tanks or pipelines; releases from the use of incorrectly designed or poorly maintained equipment for the management of materials containing hazardous substances; improper disposal of hazardous substances in surface impoundments, containers, waste piles, or landfills; and abandoned hazardous substances.

Organic materials such as chlorinated hydrocarbons, petroleum products, polycyclicaromatic hydrocarbons, and phenols are emitted into the air from site remediations. Site remediations are also performed to clean up contamination from the release of heavy metals (most commonly lead, chromium, arsenic, and cadmium) and other inorganic hazardous substances. Some site remediations

address contamination resulting from management practices used at a given facility for special types of waste materials such as mixed wastes (wastes containing both radioactive and non-radioactive hazardous constituents) and low-level radioactive wastes.

The actions taken at a given contamination site to protect human health and the environment vary depending on site-specific conditions such as the composition, physical form, and quantity of the hazardous substance and the relative degree of contamination. Typically, remediation or cleanup activities involve a contaminated media of one physical form or another (e.g., contaminated soil or groundwater). However, at some sites remediation or cleanup involves materials other than contaminated media; this might include, for example, wastes left in tanks and containers or other “pure” materials in the environment that do not include media (e.g., oil pumped from below ground). We use the term “remediation material” for both contaminated media and pure materials that are remediated.

At some sites, the remediation material is left undisturbed and containment techniques are used to prevent or significantly reduce further migration of the

contaminants to surrounding soils or to underlying groundwater aquifers (e.g., installation of a physical barrier or cap on the surface of a contaminated landfill). At many sites, the remediation material is treated to remove or destroy the hazardous substance, transform the hazardous substance into a non-hazardous form, or reduce the concentration of the hazardous substance below a threshold level. Treatment processes are available that allow the remediation material to be treated in place (commonly referred to as “in situ” treatment). Other treatment processes require first extracting the remediation material from the ground and then placing it in a treatment unit located at the site (commonly referred to as “ex situ” treatment).

Alternatively, all of the remediation material may be extracted from the site and the remediation material sent off-site to a facility for treatment or disposal, as appropriate for the form and characteristics of the remediation material (e.g., contaminated soils trucked to a hazardous waste treatment, storage, and disposal facility; or contaminated groundwater discharged through a sewer system to a publicly owned treatment works).

C. Why is site remediation a unique NESHAP source

category?

The development of a NESHAP for site remediation presents a unique set of considerations unlike any other source category for which we have established a NESHAP. The sole purpose of conducting a site remediation is to clean up an existing environmental problem. Any HAP emissions from site remediation are the direct result of the remedial activities or operations taken with the intent of protecting human health and the environment from exposure to hazardous substances. The HAP emissions do not result from processing or refining raw material, manufacturing a product, distributing a product to consumers, or even managing waste to avoid an environmental problem. In developing a NESHAP for site remediation, careful consideration must be given to establishing a proposed rule that balances the need for effective HAP emissions control with the overall goal of removing the threat to human health and the environment posed by the hazardous substances in the remediation material.

Site remediation cannot be categorized by a particular industry sector or group of industry sectors. Site remediation potentially may be conducted at any type

of business or facility at which contamination has occurred due to past events or current activities at the facility. These facilities may be privately or government owned. Site remediation is also performed at facilities that have closed or have been abandoned.

Implementation problems resulting from the fact that a Site Remediation NESHAP would potentially be applicable to facilities across a wide spectrum of industry sectors are not insurmountable. We have promulgated NESHAP for some source categories that also affect multiple industry sectors. For example, many types of businesses and federal facilities in the United States have operations subject to the Off-Site Waste and Recovery Operations (OSWRO) NESHAP under 40 CFR part 63, subpart DD. Establishing a NESHAP for this type of broad-based source category, however, does affect the regulatory approach and format used as well as how to evaluate the impacts of the proposed rule.

For the NESHAP source categories defined in terms of a specific industrial or manufacturing sector, the facilities comprising the source category (or, in some cases, subcategories within the source category) share similar processes and emissions points. In contrast to

these NESHAP source categories, the HAP emissions sources in the site remediation source category are dependent on site-specific factors. These factors determine the remedy required for a cleanup and, thereby, the sources and level of air emissions released, if any, by implementing activities associated with the selected remedy.

Another consideration is the finite period for which a site remediation is conducted. The objective of a site remediation is to mitigate a detected risk to public health or the environment by successfully completing the cleanup of the area contaminated by a hazardous substance. For NESHAP source categories associated with industrial processes or product distribution, the air emission sources typically remain in operation for many years (i.e., 10 years, 20 years, or even longer for some sources). Once an existing source reaches the end of its useful service life, it is often reconstructed or replaced with a new source. In contrast, the air emission sources associated with site remediations cease to exist once the remediation cleanup criteria are achieved. Depending on site-specific facts such as the extent of the contamination and the type of remediation

activities needed, the life span of a given site remediation may be a short period lasting several weeks to a more extended period lasting several years. Even for those site remediation activities requiring a number of years to complete, it is important to recognize that ultimately the remediation activities at a facility will be completed, and the air emission sources will no longer exist.

D. What are the sources of organic HAP emissions from site remediation activities?

Site remediation activities may emit HAP. The levels of organic HAP emissions at any given facility at which a cleanup of remediation material is being conducted depends on site-specific factors including the type of processes used and activities conducted; the quantity, organic HAP composition, and other characteristics of the remediation material; and the time required to complete the cleanup. The following sections briefly summarize potential types of HAP emission sources related to site remediation activities.

1. In situ Treatment Processes

In situ treatment processes are available for cleanup of soils and groundwater contaminated with

hazardous organic substances. The in situ processes most frequently in use at existing remediation sites physically extract volatile and semi-volatile organics by inducing controlled air flow through the remediation material. Examples of these processes are soil vapor extraction for contaminated soil and air sparging for contaminated groundwater. If not controlled, the organic vapors extracted from the soil or aqueous media are released directly to the atmosphere. Bioremediation is another category of in situ treatment process that is commonly used to remove organic contaminants. These processes are destruction processes based on stimulating microbes in the soil or groundwater to grow using the organic contaminant compound as a food and energy source. A variety of other chemical, thermal, and physical treatment processes also have been used in limited numbers of in situ applications.

Organic HAP emissions from in situ treatment processes primarily occur through a process vent. A process vent is a pipe or duct that extends above ground level through which an air or gas stream from the remediation process is exhausted to the atmosphere. Emissions occur at the point at which the organic vapor

stream exits the process vent outlet into the atmosphere. Because in situ treatment allows the contaminated material to be treated in place, the primary HAP emissions points for in situ treatment processes are process vents. Avoiding the need to first extract the contaminated media eliminates potential HAP sources associated with accumulating, handling, storing, and treating the remediation material in aboveground units.

2. Ex situ Treatment Processes

Ex situ treatment processes also remove, destroy, or transform the contaminants but first require the contaminated media to be extracted from the ground or water body before it can be treated. For a given site, using an ex-situ treatment process in place of an in situ treatment process generally allows the remediation to be completed in a shorter period; it also provides greater control of the consistency of the treatment results because of the ability to mix the extracted materials and better adjust the process parameters for optimal performance. However, total remediation costs likely will be higher using an ex situ treatment because of additional costs for material extraction and handling, worker protection, treated residual disposal, and other

factors.

Many ex situ processes treat the extracted material in a tank, vessel, reactor, combustion unit, or similar type of contained process unit. Extracted material for some ex situ treatment processes is treated directly on the land surface or in a surface impoundment. The ex situ treatment processes frequently used at remediation sites are groundwater pump and treat, solidification/stabilization, and incineration. Thermal desorption, bioremediation, and air stripping are also types of ex situ treatment technologies commonly used for cleanup of soils and groundwater contaminated with hazardous organic substances.

Solidification/stabilization technologies are primarily used to treat metals and other types of inorganic contaminants. In general, these technologies have limited effectiveness for treatment of organics. Solidification and stabilization processes reduce the mobility of a contaminant by physically binding or enclosing it within a stabilized mass (solidification), or by chemically binding to a stabilizing agent (stabilization).

Incineration can be used to destroy organics in

contaminated soils and other contaminated solid wastes by combustion at high temperatures (i.e., 870 to 1,200°C (1,400 to 2,200°F)). The contaminated material is burned in a rotary, circulating-bed, fluidized-bed, or other type of combustor. Often an auxiliary fuel such as natural gas is also burned to initiate and sustain combustion of the contaminated material. Treatment of contaminated materials by incineration is most frequently conducted by sending the material to a permanent, off-site incinerator facility, although mobile incinerators are available and sometimes brought on-site.

Incinerators used to treat remediation wastes are subject to existing air emission regulations. We promulgated interim standards for the NESHAP for hazardous waste combustion sources under 40 CFR part 63, subpart EEE with final standards to be promulgated by June 14, 2005. If the remediation wastes are classified as hazardous under the Resource Conservation and Recovery Act (RCRA) subtitle C regulations, the waste must be burned in a RCRA-permitted incinerator. Incinerators required to meet the hazardous waste combustion NESHAP or RCRA standards use extensive air pollution control systems to

achieve emissions limitation standards for organics, particulate matter, metals, and chloride emissions. These systems treat the incinerator exhaust gas stream to control emissions of particulate matter, acid gases, and other pollutants.

Thermal desorption is another process used for treating contaminated soils. Unlike incineration, the process is not designed to destroy organics but instead to physically separate the organics from the media. The contaminated soil or other material is heated in a vessel to volatilize organic compounds. Two common vessel designs are the rotary dryer and thermal screw. The bed temperatures and residence times used for the process are at a level that will volatilize selected organic contaminants but will typically not oxidize them. A carrier gas or vacuum system is used to vent the volatilized organics from the vessel to a gas stream treatment system where the organic vapors are removed or destroyed. The organic contaminants typically are either removed through condensation followed by carbon adsorption, or they are destroyed in a secondary combustion chamber or a catalytic oxidizer.

The thermal desorption process is used at site

remediation activities for the separation of organics from refinery wastes, hydrocarbon-contaminated soils, coal tar wastes, wood-treating wastes, creosote-contaminated soils, pesticides, and paint wastes. Many of these process units are transportable and are temporarily set up at the remediation site for the duration of the cleanup.

Air stripping is a physical separation process widely used to remove volatile organics from contaminated groundwater. Air stripping involves the mass transfer of VOC from the water to air by contacting the water with an induced air flow. For groundwater remediation, the air stripping process is typically conducted by pumping the groundwater from extraction wells to a packed tower or an aeration tank. Air strippers can be operated continuously or in a batch mode where the air stripper is intermittently fed from a collection tank. Using batch mode operation improves the air stripper performance consistency and energy efficiency compared to a continuously operated unit because mixing in the storage tanks provides a uniform feed water composition.

The typical packed tower air stripper uses a spray nozzle at the top of a tower to distribute the

contaminated water over packing in the column. A fan or blower forces air upward from the bottom of the tower countercurrent to the water flow. A sump at the bottom of the tower collects decontaminated water while a vent on the top of the tower discharges the air/vapor stream. Depending on the organic concentrations in the groundwater and local air permitting requirements, the vent stream may be discharged directly to the atmosphere or through an appropriate organic air emission control device such as activated carbon adsorber, catalytic vapor oxidizer, or thermal vapor oxidizer.

Aeration tanks strip VOC by bubbling air into an open-top tank through which contaminated water flows. A forced air blower and a distribution manifold are designed to provide good air-water contact without the need for any packing materials. If the aeration tank is uncovered, the stripped VOC are emitted to the atmosphere.

Bioremediation technologies are successfully used to clean up excavated soils, dredged sludges and sediments, and pumped groundwater contaminated with petroleum hydrocarbons, solvents, pesticides, wood preservatives, and other organic chemicals. These processes rely on

indigenous or inoculated micro-organisms (e.g., fungi, bacteria, and other microbes) to degrade organic contaminants found in the soil or groundwater by metabolism. In the presence of sufficient oxygen (aerobic conditions) and other nutrient elements, microorganisms convert many organic compounds to carbon dioxide, water, and microbial cell mass. In the absence of oxygen (anaerobic conditions), microorganisms convert the organic compounds to methane, limited amounts of carbon dioxide, and trace amounts of hydrogen gas.

For ex situ biotreatment of contaminated soils and dredged sediments, the excavated material is first processed to physically separate stones and other debris. The contaminated solids are then mixed with water to a predetermined concentration dependent upon the concentration of the contaminants, the rate of biodegradation, and the physical nature of the soils. This soil slurry is placed in a reactor vessel (i.e., a bioreactor) and mixed with nutrients and, in some cases, other additives. If the process is an aerobic process, air or oxygen is blown into the reactor. When biodegradation is complete, the soil slurry is dewatered using clarifiers, pressure filters, vacuum filters, sand

drying beds, or centrifuges. Use of ex situ bioreactors often is favored over using an in situ bioremediation process for heterogenous soils, low-permeability soils, or when a shorter remediation period is required.

Biodegradation processes are used at many industrial facilities to treat process wastewaters containing organics. These same processes can be used to treat contaminated groundwater containing organics. At those remediation sites where bioremediation is used to treat contaminated groundwater pumped from the ground, the common practice is to discharge the water either to the facility's existing process wastewater treatment facility or directly to a sewer for treatment at an off-site wastewater treatment facility.

As an alternative to conducting biodegradation in a bioreactor or other type of enclosed vessel, land treatment and land farming are open biodegradation processes performed on top of the ground surface. For these processes, the extracted material is applied on top of the ground in thin, lined beds or, in some cases, tilled directly back into the upper soil layer. Aerobic microbes decompose the organic compounds contained in the applied material. The material is periodically turned

over or tilled to aerate the waste. Organic emissions are generated due to the volatilization of organics from the exposed surface of the materials primarily during initial application and tilling. After application and tilling, organic emissions continue to occur from the material mixture, although at a decreasing rate, until nearly all of the volatile organics originally in the applied material are either emitted or biologically degraded.

Like in situ treatment processes, primary sources of HAP emissions from many types of ex situ treatment processes are process vents. However, unlike in situ treatment processes, there are other potential HAP emissions sources associated with ex situ treatment processes because the contaminated media is extracted from the ground and subsequently managed at the facility as essentially a waste material. Even if treatment of the material is not performed at the facility, any tanks, containers, and other types of equipment used to handle and/or temporarily store the material before it is shipped off-site are potential sources of air emissions. These potential HAP emissions sources are discussed in the next section.

3. Other Extracted-Media Sources

Material extraction activities. Depending on the characteristics of the remediation material and the extraction method used, organic HAP may be emitted by the extraction activities. Soils, sludges, and sediments are frequently extracted using heavy construction equipment. Volatilization of organics from the freshly exposed surfaces of the extracted materials can release organic HAP into the atmosphere.

Tanks. Tanks can be used at a facility to accumulate, temporarily store, or treat extracted materials containing organics. These tanks can either be open tanks (i.e., the surface of the waste material is exposed directly to the atmosphere) or covered tanks (i.e., the surface of the waste material is enclosed by a roof or cover). Organic HAP emissions result from the volatilization of organic-containing materials placed in the tank, and the subsequent release of these organic vapors to the atmosphere. For open tanks, the organic vapors released from the surface of the material are dispersed immediately into the atmosphere by diffusion and wind effects. Covering a tank (referred to as a "fixed-roof tank") significantly lowers organic emissions

compared to open tanks. However, organic HAP emissions still occur from fixed-roof tanks from the displacement of organic vapors that have collected in the enclosed space above the surface of the stored material through vents on the tank roof. This displacement occurs during tank filling operations when the vapors are pushed out through the tank vents by the rising level of material in the tank (commonly referred to as "working losses") and to a lesser extent, when the volume of the vapor in the tank is increased by fluctuations in ambient temperature or pressure (commonly referred to as "breathing losses".) The quantity of organic emissions from a fixed-roof tank varies depending on volatility of the organic constituents in the extracted materials.

Separators. Separators are used to separate oil or organics from water. Organic emissions from these sources are similar to those occurring from open-top wastewater treatment tanks.

Containers. Containers such as drums, dumpsters, and roll-off boxes may be used to accumulate, store, and treat extracted materials. Organic HAP emissions from containers can result from several emission mechanisms. Organic emissions occur during loading of liquid, slurry,

and sludge waste materials into containers due to the displacement of organic vapors to the atmosphere through container openings by the rising level of material in the container. Once loaded, containers that remain open to the atmosphere are an emission source when organics evaporate from the exposed surface of the material placed in the container.

Surface Impoundments. Although extracted groundwater, slurries, and sludge materials are managed in tanks at most site remediations, these materials under special circumstances may be managed in surface impoundments. A surface impoundment is an earthen pit, pond, or lagoon. Organic emissions from surface impoundments occur as organics evaporate from the exposed surface of the materials placed in the impoundment. Surface impoundments containing organic-containing materials may have high organic emissions because of the large exposed surface area and the extended residence time that materials remain in the impoundment (sometimes weeks or months).

Transfer Equipment. Organic HAP emissions can potentially occur during the transfer of a material if the transfer system is open to the atmosphere.

Volatilization of organics from the exposed surfaces of the extracted materials can release organic HAP into the atmosphere. Examples of such systems include individual drain systems (with all associated drains, junction boxes, and sewer lines), channels, flumes, gravity-operated conveyors (such as a chute), and mechanically-powered conveyors (such as a belt or screw conveyor).

Equipment Leaks. Leaks from pumps, valves, and other ancillary equipment needed to operate material handling and treatment processes can be a potential source of organic HAP emissions. Organic vapors can be emitted directly to the atmosphere by flowing through small openings created in worn or defective pump and valve packings, flange gaskets, or other types of equipment seals. In addition, organic emissions occur when liquids leak outside the equipment exposing the leaked fluid to the ambient air. Emissions result when organics contained in the drip, puddle, or pool of leaked liquid evaporate into the atmosphere. Although the quantity of organic emissions from a single leak is small, when many equipment leaks occur at a facility, the total organic HAP emissions from equipment leaks can be significant.

E. What are the potential health effects associated with organic HAP emitted from site remediation activities?

The range of potential human health effects associated with exposure to organic HAP and VOC include cancer, aplastic anemia, upper respiratory tract irritation, liver damage, and neurotoxic effects (e.g., headache, dizziness, nausea, tremors). Thus, the proposed rule has the potential for providing both cancer and noncancer related health benefits. The following is a summary of the potential health effects associated with exposure to some of the primary HAP emitted from site remediation activities.

1. Benzene

Acute (short-term) inhalation exposure of humans to benzene may cause drowsiness, dizziness, and headaches, as well as eye, skin, and respiratory tract irritation, and, at high levels, unconsciousness. Chronic (long-term) inhalation exposure has caused various disorders in the blood, including reduced numbers of red blood cells and aplastic anemia, in occupational settings. Reproductive effects have been reported for women exposed by inhalation to high levels, and adverse effects on the developing fetus have been observed in animal tests.

Increased incidence of leukemia (cancer of the tissues that form white blood cells) has been observed in humans occupationally exposed to benzene. We have classified benzene as a Group A, known human carcinogen.

2. Ethyl benzene

Acute exposure to ethyl benzene in humans results in respiratory effects such as throat irritation and chest constriction, irritation of the eyes, and neurological effects such as dizziness. Chronic exposure to ethyl benzene by inhalation in humans has shown conflicting results regarding its effects on the blood. Animal studies have reported effects on the blood, liver, and kidneys from chronic inhalation exposures. No information is available on the developmental or reproductive effects of ethyl benzene in humans, but animal studies have reported developmental effects, including birth defects in animals exposed via inhalation. We have classified ethyl benzene in Group D, not classifiable as to human carcinogenicity.

3. Toluene

Humans exposed to toluene for short periods may experience irregular heartbeat and effects on the central nervous system (CNS) such as fatigue, sleepiness,

headaches, and nausea. Repeated exposure to high concentrations may induce loss of coordination, tremors, decreased brain size, and involuntary eye movements, and may impair speech, hearing, and vision. Chronic exposure to toluene in humans has also been indicated to irritate the skin, eyes, and respiratory tract, and to cause dizziness, headaches, and difficulty with sleep. Children exposed to toluene before birth may suffer CNS dysfunction, attention deficits, and minor face and limb defects. Inhalation of toluene by pregnant women may increase the risk of spontaneous abortion. We have developed a reference concentration of 0.4 milligrams per cubic meters (mg/m^3) for toluene. Inhalation of this concentration or less over a lifetime would be unlikely to result in adverse noncancer effects. No data exist that suggest toluene is carcinogenic. We have classified toluene in Group D, not classifiable as to human carcinogenicity.

4. Vinyl chloride

Acute exposure to high levels of vinyl chloride in air has resulted in CNS effects such as dizziness, drowsiness, and headaches in humans. Chronic exposure to vinyl chloride through inhalation has resulted in liver

damage to humans. Human and animal studies show adverse effects that raise a concern about potential reproductive and developmental hazards to humans from exposure to vinyl chloride. Cancer is a major concern from exposure to vinyl chloride via inhalation, as vinyl chloride exposure has been shown to increase the risk of a rare form of liver cancer in humans. We have classified vinyl chloride as a Group A, known human carcinogen.

5. Xylenes

Acute inhalation of mixed xylenes (a mixture of three closely related compounds) in humans may cause irritation of the nose and throat, nausea, vomiting, gastric irritation, mild transient eye irritation, and neurological effects. Chronic inhalation of xylenes in humans may result in CNS effects such as headaches, dizziness, fatigue, tremors, and incoordination. Other reported effects include labored breathing, heart palpitation, severe chest pain, abnormal electrocardiograms, and possible effects on the blood and kidneys. We have classified xylenes in Group D, not classifiable as to human carcinogenicity.

6. Volatile organic compounds

By requiring facilities to reduce organic HAP

emitted from site remediation activities, the proposed rule would also reduce emissions of those VOC that are not HAP but contribute to adverse human health affects. Many VOC react photochemically with nitrogen oxides in the atmosphere to form tropospheric (low-level) ozone. A number of factors affect the degree to which VOC emission reductions will reduce ambient ozone concentrations.

Human laboratory and community studies have shown that exposure to ozone levels that exceed the national ambient air quality standards (NAAQS) can result in various adverse health impacts such as alterations in lung capacity and aggravation of existing respiratory disease. Animal studies have shown increased susceptibility to respiratory infection and lung structure changes. The VOC emissions reductions resulting from the proposed rule will reduce low-level ozone and have a positive impact toward minimizing these health effects.

Among the welfare impacts from exposure to air that exceeds the ozone NAAQS are damage to some types of commercial timber and economic losses for commercially valuable crops such as soybeans and cotton. Studies have shown that exposure to excessive ozone can disrupt

carbohydrate production and distribution in plants. This can lead in turn to reduced root growth, reduced biomass or yield, reduced plant vigor (which can cause increased susceptibility to attack from insects and disease and damage from cold), and diminished ability to successfully compete with more tolerant species. In addition, excessive ozone levels may disrupt the structure and function of forested ecosystems.

F. What is the relationship of the rule to other EPA regulatory actions affecting site remediation activities?

Existing requirements for site remediations conducted under the Comprehensive Environmental Response and Compensation Liability Act (CERCLA) and RCRA programs are administered under the oversight of EPA's Office of Solid Waste and Emergency Response (OSWER). A site remediation may be regulated under one of three OSWER programs.

1. Superfund Removal and Remedial Actions

Remediation activities under the Superfund program are exempt from the requirements of the proposed rule. See discussion in section II.A of this preamble.

2. RCRA Corrective Actions

Remediation activities under the RCRA Corrective

Action program are exempt from the requirements of the proposed rule. See discussion in section II.A of this preamble.

3. Underground Storage Tanks

Subtitle I of RCRA directs the EPA to establish regulatory programs to prevent, detect, and clean up releases from underground storage tanks (UST) containing petroleum or hazardous substances listed under section 101(14) of CERCLA (petroleum is specifically excluded from this CERCLA list). The EPA's Office of Underground Storage Tanks is responsible for developing and implementing the UST program. Federal regulations for UST have been developed which specify requirements for tank notification, interim prohibition, new tank standards, reporting and recordkeeping requirements for existing tanks, corrective action, financial responsibility, compliance monitoring and enforcement, and approval of State programs. The technical standards are codified in 40 CFR part 280 and 40 CFR part 281 with the list of CERCLA hazardous substances in 40 CFR part 302.4.

The EPA is authorized under subtitle I to delegate UST regulatory authority to approved State programs.

States with delegated authority administer and enforce their own approved UST program instead of the Federal regulations. There are currently 25 States and the District of Columbia with approved UST programs. Each of the approved State UST programs is codified in 40 CFR part 282. In the other States without an approved UST program, EPA administers and enforces the Federal regulations.

An UST is a tank having a capacity greater than 110 gallons for which the volume of the tank (including the volume of any connected underground pipes) is 10 percent or more beneath the surface of the ground. The major category of UST regulated under this program are tanks used to store petroleum and petroleum-based substances including crude oil, motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils. The regulations also apply to underground tanks used to store any hazardous substance defined in section 101(14) of CERCLA but are not regulated as a hazardous waste under RCRA subtitle C. The regulations do not apply to underground tanks used for a number of specific applications listed in the applicability and definition sections of the rules.

The owners and operators of petroleum or hazardous substance UST systems must clean up any spills, leaks, or other releases from the tank into groundwater, surface water, or subsurface soils. Subpart F under 40 CFR part 280 specifies the general requirements for a release response and for corrective action. The specific requirements are determined based on the site-specific circumstances. In cases where contamination of soil or groundwater has occurred, the site remediation may proceed according to a corrective action plan approved by the EPA or the designated State or local agency responsible for implementing the UST program at the UST site. Under the subpart F requirements, this plan must provide for adequate protection of human health and the environment as determined by the site-specific factors including an exposure assessment.

G. What criteria are used in the development of NESHAP?

Section 112 of the CAA requires that we establish NESHAP for the control of HAP from both new and existing sources. The CAA requires the NESHAP to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as MACT.

The MACT floor is the minimum control level allowed for NESHAP and is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that standards are set at levels that assure that all major sources achieve the level of control at least as stringent as that already achieved by the better-controlled and lower-emitting sources in each source category or subcategory. For new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitations achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing 5 sources for categories or subcategories with fewer than 30 sources).

In developing MACT, we also consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on the consideration of cost of achieving the emissions reductions, any health and environmental impacts, and energy requirements.

II. Summary of the Proposed Rule

The proposed rule would amend title 40, chapter I, part 63 of the Code of Federal Regulations by adding a new subpart GGGGG -- National Emission Standards for Hazardous Air Pollutants for Site Remediation. The following is a summary of the requirements for the proposed rule.

A. Who is affected by the proposed rule?

1. General Applicability

The proposed rule would affect owners and operators of facilities, with certain exceptions described below, that are major sources of HAP emissions, where a MACT activity is also conducted, and at which a site remediation is performed. All three criteria must exist for the rule to apply. For the purpose of implementing the proposed rule, a site remediation is one or more activities or processes used to remove, destroy, degrade, transform, or immobilize organic HAP constituents in soils, sediments, groundwater, surface waters, or other types of solid or liquid environmental media as well as pure materials that are not mixed with environmental media.

2. Major Source Determination

A major source of HAP is defined under CAA section

112 as any stationary source or group of stationary sources located within a contiguous area and under common control that emits, or has the potential to emit, any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year. In determining whether or not your facility is a major source, you would consider all sources of HAP emissions or potential emissions at your facility.

A major source determination includes consideration of a facility's potential to emit (PTE) as well as actual emissions. The PTE is the maximum capacity of a stationary source to emit under its physical and operational design. Any physical or operational limitations on the source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation, or on the type or amount of material combusted, stored, or processed, is treated as part of the source's design if the limitation is enforceable by the EPA Administrator.

There are a number of tools and resources available to assist an owner or operator in estimating and inventorying their facility's or source's HAP emissions. For example, our Air Clearinghouse for Inventories and

Emission Factors (CHIEF) website (www.epa.gov/ttn/chief/software/airchief) provides the public and private sector users access to air emission data specific to estimating the types and quantities of pollutants that may be emitted from a variety of sources. For those sources or emission points most typically associated with site remediation activities (such as tanks and surface impoundments), our WATER9 computer program provides an analytical model for estimating compound specific air emissions from waste and wastewater collection, storage, and treatment systems.

For additional information on determining if your source is a major source, EPA policy memoranda and other guidance on major source determinations and PTE can be found on the Internet at www.epa.gov/ttn/oarpg under "OAR Policy and Guidance Information" or on the Air Toxics Website at www.epa.gov/ttn/atw/pte/ptepg.

3. MACT Activity

A "MACT activity" is defined as a non-remediation activity that is covered by one of the listed major source categories. This list is compiled pursuant to CAA section 112(c) and was first published on July 16, 1992 (57 FR 31576). The list is updated periodically with the

most recent update published in the Federal Register on February 12, 2002 (67 FR 6521). The term “covered” here does not mean that the non-remediation activity is necessarily subject to a MACT standard, just that the activity is included within the scope of a particular MACT source category.

4. Exemptions

The proposed rule would not apply to site remediations we are specifically excluding from applicability.

a. CERCLA Cleanups and RCRA Corrective Action

The proposed rule exempts sites addressed under CERCLA authority and corrective action activities initiated under permits or orders, including such activities under authorized state programs, at RCRA Treatment, Storage and Disposal facilities. Superfund National Priorities List (NPL) sites have extensive contamination that often require many years of study to determine a permanent remedy. Superfund sites are regulated under a program created by CERCLA that was enacted in 1980 and amended by the Superfund Amendments and Reauthorization Act in 1986.

The Superfund program is designed to protect

public health and the environment while providing the flexibility to use effective and innovative remediation approaches that best suit the site-specific conditions at each CERCLA site (CERCLA section 121). The Superfund program conducts extensive evaluation of the contamination at each NPL site (see 40 CFR 300.430). As part of the evaluation process, a decision document (i.e., Record of Decision (ROD)) is developed for response actions, documenting the extent of contamination and the cleanup method(s) to be used at the site. Under this process, a site-specific analysis, considering the impacts to air, soil and groundwater, is conducted and an appropriate remedy is selected. During the ROD process, the general public is given the opportunity for input in the decision-making process through public hearings and submission of written comments. The public plays an important role in identifying and characterizing site-specific factors, such as the type of contaminants, the level and extent of contamination and other site-specific factors. We believe this procedure results in selection of the best plan for cleaning up each site and achieving the program’s goals.

As implemented under the requirements of RCRA,

hazardous waste treatment, storage and disposal facilities (TSDF) must obtain a permit specifying requirements for managing hazardous waste. As a condition of obtaining this permit, facilities are required to undertake corrective action addressing releases of hazardous waste and hazardous constituents from units at the facility which do not themselves require RCRA permits (solid waste management units)(RCRA section 3004(u)). For such designated contamination areas at TSDF, requirements for the cleanup of the contamination are included in the facility's RCRA permit, or Federal Order where applicable. Such cleanup activities are known as "corrective actions." Although RCRA is a separate program from Superfund, the RCRA permitting or Federal Order process for TSDF share several significant characteristics with Superfund cleanup activities at NPL sites. First, it is also the intent of the RCRA Corrective Action program to protect public health and the environment while allowing flexibility in choosing solutions to eliminate or reduce site contamination. Second, RCRA permitting and Federal Order procedures involve the public in the decision-making process through informal public meetings, public

hearings or written comment. Finally, an extensive site-specific evaluation is performed at the RCRA facility to evaluate the extent of the contamination, while considering appropriate remedies through a multi-media (i.e., air, soil, groundwater) perspective.

We believe that requiring remediation activities at Superfund NPL sites and at permitted or Federal Order RCRA corrective action sites to meet the requirements of this proposed rule could either create incentives to avoid cleanup, or result in the selection of a remediation approach that is less desirable, protective or permanent (e.g., capping or containing the contaminated media instead of permanently removing or treating the contaminants). (Cf. Louisiana Environmental Action Network v. EPA, 172 F. 3d 65, 67, 70 (D.C. Cir. 1999)(EPA lacks authority in many instances to compel excavation of wastes, so that imposition of requirements on excavated wastes discourages more protective remediations; EPA may permissibly adjust rules applicable to excavated wastes to avoid this result.)) Furthermore, we believe that these existing programs are the most appropriate, comprehensive and effective regulatory approach to address air emissions resulting from site

remediation activities at sites addressed using CERCLA authority and RCRA corrective action sites and to avoid transfer from one medium to another.

b. Other Exemptions

The proposed rule would not apply to site remediation activities involving the cleanup of radioactive mixed waste managed in accordance with all applicable regulations under Atomic Energy Act and Nuclear Waste Policy Act authorities. Another applicability exemption is provided for those site remediations performed to clean up remediation material containing little or no organic HAP. The proposed rule would not apply to any facility for which the owner or operator demonstrates that the total annual organic HAP mass content of the remediation material to be cleaned up at the facility is less than one Mg/yr.

5. Application of Once In, Always In Policy

Due to the potential short term nature of site remediations, we have evaluated how the proposed rule fits with existing policies for CAA section 112 standards. Our current policy is that once a facility or source is subject to a MACT standard, it remains subject to that standard as long as the affected source

definition or criteria are met. This is called the “once in, always in” policy. Because of the uniqueness of this source category and the nature of the activities that are being regulated in the proposed rule, we have evaluated how our once in, always in policy should apply relative to the site remediation source category.

The existing policy may affect facilities that conduct site remediations in situations where a facility is presently an area source and the remediation activities would increase the total facility PTE such that the facility exceeds the 10/25 tons of HAP criteria for a major source under CAA section 112. Because the facility is now considered a major source of HAP, another operation at the facility, such as a manufacturing process, would now be subject to NESHAP for other source categories located at their facility. Furthermore, after the remediation is completed, the facility would, in terms of emissions, essentially be back to where it was as an area source (assuming no change in the facility plant operations). Under the once in, always in policy, the facility would remain subject to the NESHAP that was triggered by the short-term change of source status from area to major brought about by the site remediation

activity.

In the situation described above, we believe the once in, always in policy would create an obvious disincentive for owners or operators to engage in site remediations, particularly since voluntary remediation would be affected by the proposed rule. Our intent is to not prescribe requirements that create incentives to avoid a cleanup or result in the selection of less desirable or less protective or permanent remediation approaches. Therefore, we have determined that the once in, always in policy does not apply relative to the site remediation source category for those facilities that are area sources prior to and after the cleanup activity.

The above application of the once in, always in policy to site remediation activities addresses the issue of a facility's MACT obligation after completing a remediation activity. We believe a situation could occur, based on language in the CAA, that this policy does not address. Specifically, certain area sources for non-remediation activities could become major sources once a remediation activity begins operation. While the facility would have no MACT obligation (Site Remediation MACT or otherwise) after completing all remediation,

compliance with a non-remediation MACT standard may be required due to the increase in PTE from the remediation activity. An example of this situation would be an area source chemical processing plant not currently subject to the Hazardous Organic NESHAP (HON), but with manufacturing operations covered by that MACT standard. After operating for many years as an area source, the facility initiates a remediation operation that increases its PTE to major source levels. Since the facility is now a major source of HAP, the facility would have to comply with the HON for the operations covered by that MACT standard. Furthermore, since the compliance dates for the various processes regulated by the HON have all passed, any controls required by the HON would have to be in place at the time the facility became a major source as specified by the HON. Prior to commencing the remediation activity, the facility may find it preferable to install federally enforceable controls on certain emission points and maintain area source status to avoid becoming subject to the industry-relevant MACT standard. We realize this option is not achievable in every case.

6. Exemption of short-duration site remediations

The EPA is proposing to exempt sources from the

requirements of the proposed rule where the contamination requiring remediation occurs within 7 days prior to the remediation activity. This exemption is intended to apply to contamination commonly caused by a spill where the cleanup is initiated soon after the spill event and is of very short duration (i.e., typically 30 days or less). The purpose of this exemption is to encourage prompt attention to remediating contaminant spills and leakages.

Although the Agency is not proposing any other duration-based exemptions in the proposed rule, it is possible that other duration-based exemptions may be appropriate in light of the policy goal of encouraging voluntary site remediations to remove risk to human health and the environment. For example, there may be some site remediations that can be completed in the time required by this proposal to modify relevant permits; it may make sense in cases like this to complete the remediation activity as quickly as possible without waiting for paperwork modifications to be completed. The Agency requests comment on which situations, if any, might be appropriate for further duration-based exemptions to today’s proposed rule.

B. What are the affected sources?

The proposed rule defines three groups of affected sources, (1) process vents, (2) remediation material management units, and (3) equipment leaks. The affected source for process vents is the entire group of process vents associated with both in situ and ex situ remediation activities. The affected source for remediation material management units is the entire group of tanks, surface impoundments, containers, oil/water separators, and transfer systems used to store, transfer, treat, or otherwise manage remediation material. The affected source for equipment leaks is the entire group of remediation equipment components (pumps, valves, etc.) that contain or contact remediation material having a total organic HAP concentration equal to or greater than 10 percent by weight, and are intended to operate for 300 hours or more during a calendar year.

C. What are the standards for process vents?

The proposed rule would establish emission limitation and operating standards for certain process vents associated with site remediation treatment processes. The same standards would apply to both in situ and ex situ treatment processes. These standards

would apply to the entire group of affected process vents associated with all of the treatment processes used for your site remediation. The standards would be the same for existing and new sources.

The air emission control requirements under the proposed rule would not apply to certain process vent streams with low flow, low HAP concentration characteristics. A process vent would be exempted from the air emission control requirements of the NESHAP if the owner or operator determines the process vent stream flow rate to be less than 0.005 standard cubic meters per minute. Also exempted would be those process vent streams having a flow rate less than 6.0 standard cubic meters per minute and a total HAP concentration in the vent stream less than 20 parts per million by volume (ppmv). This process vent exemption requires that both the process vent flow rate and the organic HAP concentration criteria be met to qualify for the exemption. A process vent would also be exempted from the air emission control requirements if the HAP concentration of the remediation material being treated by the vented process is less than 10 parts per million by weight (ppmw).

Under the proposed rule, you would have two compliance options for the affected process vents. The first option would be to reduce the total organic HAP emissions from all affected process vents at the facility to a level less than 1.4 kilograms per hour (kg/h) (approximately 3.0 pounds per hour) and 2.8 Mg/yr (approximately 3.1 tpy). You would have to achieve both of these mass emission limitations to comply with this option under the proposed rule. If the total organic HAP emissions from all affected process vents associated with your site remediation exceed either the hourly or annual mass emission limitation then you would need to use appropriate controls to reduce the emission levels to comply with the emission limitations. If you can meet both of the total organic HAP mass emission limitations using no controls or the existing controls you already have in place to meet federally-enforceable organic emission standards, then no additional controls would be required under the proposed rule for your affected process vents.

As an alternative to complying with the mass emission limits, a second option proposed under the proposed rule would be to reduce the total organic HAP

emissions from all of the affected process vents by at least 95 weight percent. At sites with multiple affected process vent streams, you may comply with this option by a combination of controlled and uncontrolled process vent streams that achieve the 95 percent reduction standard on an overall mass-weighted average. For those process vent streams controlled by venting to a control device, the closed vent system and control device would need to meet certain requirements specified in the proposed rule.

D. What are the standards for remediation material management units?

The proposed rule would establish emissions limitation and operating standards for certain remediation management units (i.e., units associated with the management of remediation materials). For those remediation material management units required to use air emission controls, the proposed rule would establish by source type (i.e., tanks, oil-water separators, containers, surface impoundments, transfer systems) separate sets of emission limitation, operating limit, and work practice standards as appropriate for each source type. The standards would be the same for existing and new sources. Air emission controls would be

required on a remediation material management unit used to manage remediation material having an organic HAP (VOHAP) concentration equal to or greater than 500 ppmw. Remediation material with a VOHAP concentration of less than 500 ppmw is not required to be managed in controlled units.

The proposed rule also provides an exemption that would allow an owner or operator to selectively designate, on a site-specific basis, certain individual units to be exempt from the air emission control requirements regardless of the VOHAP concentration of the remediation material placed in the unit. Application of this discretionary exemption by the owner or operator would be limited based on remediation material organic HAP content. Under this provision, the total annual organic HAP mass content of the regulated remediation material placed in all of the units designated by the owner or operator as exempt units could not exceed 1 Mg/yr as determined in accordance with the procedures specified in the proposed rule.

Determination of VOHAP concentration can be made by either direct measurement of samples of the remediation material or through use of knowledge of the remediation

material (i.e., application of owner/operator expertise using appropriate information regarding the remediation material). In using direct measurement, the VOHAP concentration of the collected samples would be measured using Method 305 in 40 CFR part 63, appendix A. As an alternative to using Method 305, you would be allowed to determine the organic HAP concentration using any one of the several alternative test methods, as applicable to the remediation material stream, and then adjust the test results using factors specified in the proposed rule to determined the VOHAP concentration.

The VOHAP determination using direct measurement for a given remediation material unit would be based on samples collected prior to placing the remediation material in the unit at any point you choose before the organic constituents in the material have the potential to volatilize and be released to the atmosphere. For example, you may sample the remediation material stream at the point where it is extracted from the ground ("point-of-extraction" as defined in the proposed rule). Alternatively, you may choose to sample the remediation material stream within the remediation material unit (provided that organic constituents in the material have

not been allowed to volatilize and be released to the atmosphere, as specified in the proposed rule).

Allowing the use of knowledge to determine the VOHAP concentration of a remediation material provides flexibility for the owner or operator to use any appropriate information to determine VOHAP concentration of a remediation material. The basis for knowledge of the remediation material could include existing information collected by the owner or operator for other purposes or new information collected specifically for the VOHAP remediation material determination.

For remediation material management units downstream of the contaminated area in particular, it is important to note that the determination of the VOHAP concentration is made within each remediation material management unit. This approach simplifies the determination process for varying treatment processes and addresses both the situation of management of a single remediation stream or management of two or more material streams combined (either remediation or non-remediation, or both). If a single material stream, or combination of streams, have a VOHAP concentration of 500 ppmw or greater in the management unit, then the unit is subject to the air

emission control requirements for the particular unit as specified in the proposed rule. Once the VOHAP concentration falls below the 500 ppmw action level, the material need not be managed in controlled units. If the HAP concentration is increased to 500 ppmw or more in a downstream unit, that unit will need control.

For example, a facility remediation project involves a pump and treat system that generates groundwater with more than 500 ppmw VOHAP, measured as it exits the groundwater pumping/piping system. It is initially pumped into a holding tank managing the single remediation stream. The remediation material, the groundwater in this case, has a VOHAP concentration greater than 500 ppmw, and, therefore, the holding tank would be subject to the tank standards under the proposed rule. From the holding tank, the groundwater is sent to a larger mixing tank where the groundwater is mixed with other wastewater streams, where the combined VOHAP concentration is less than 500 ppmw, and the resultant mixture is treated to adjust the pH of the mixture. Because the VOHAP concentration of the combined streams is below 500 ppmw, the mixing tank would not be subject to the tank standards under the proposed rule.

Following this mixing operation, the combined wastewater is sent to an on-site wastewater treatment system. Since the mixture leaving the mixing tank has a VOHAP concentration of less than 500 ppmw, all downstream processes and management units (e.g., tanks, surface impoundments, containers or transfer systems) would not be subject to the control requirements for remediation material management units unless the concentration is increased to 500 ppmw or greater through phase separation or other method.

In general, we expect remediation streams to be managed separately so a stream would be managed in controlled units until it is treated to reduce the concentration below 500 ppmw. We believe, however, that in some cases a remediation stream may be combined with one or more streams and treated downstream from the mixing point. Mixing merely for the purposes of dilution is not allowed, but if mixing occurs to facilitate treatment (i.e., to treat all streams in a centralized operation), and the resulting stream has a VOHAP concentration below 500 ppmw, then that stream does not have to be managed in controlled units.

We realize this approach deviates somewhat from

other rules regulating wastewater-type management or treatment units that require air emission controls after the VOHAP concentration falls below 500 ppmw due to mixing. For site remediation operations, this is an appropriate approach since we believe remediation activities are typically of a limited duration, relatively low-flow in comparison to facilitywide wastewater management operations, and often treated effectively in a facility-wide treatment system. We do not want to create obstacles that could inhibit overall treatment effectiveness. Moreover, we believe remediation streams would get some level of HAP reduction, and, thus, emission reduction, through biological treatment within a facility's wastewater treatment system.

1. Tanks

The proposed rule would establish emission limitation and work practice standards to control organic HAP emissions from those tanks managing remediation material having an average VOHAP concentration equal to or greater than the 500 ppmw action level. For those tanks required to meet the air emission control requirements, you would need to achieve one of two levels

of control. The required level of control would be determined by the tank design capacity and the maximum HAP vapor pressure of the extracted material in the tank.

For each tank required to use Level 1 controls, you would be required to comply with the existing 40 CFR part 63, subpart OO - National Emission Standards for Tanks - Level 1. For these tanks, you could also comply with the proposed rule by using Level 2 controls if you choose to do so.

For each tank required to use Level 2 controls, you would have five compliance options under the proposed rule. The compliance alternatives provided under the proposed rule would allow you to either: (1) use a fixed-roof tank with an internal floating roof; (2) use an external floating roof tank; (3) vent the tank through a closed vent system to a control device that meets the requirements specified in the proposed rule; (4) locate an open tank inside an enclosure vented through a closed-vent system to a control device that meets the requirements specified in the proposed rule; or (5) use a pressurized tank that operates as a closed system during normal operations. The specific technical requirements for each of these alternatives are implemented under the

proposed rule by cross-referencing the existing Tank Level 2 control standards in 40 CFR 63.685(d) of the OSWRO NESHAP.

2. Containers

The proposed rule would establish emission limitation and work practice standards to control organic HAP emissions from containers having a design capacity greater than 0.1 cubic meters (approximately 26 gallons) used to manage remediation material having a VOHAP concentration of 500 ppmw or more. For those containers required to use air emission controls, you would need to achieve one of three levels of control that would be determined by the container design capacity, the organic content of the extracted material in the container, and whether the container is used for a waste stabilization process. You would be required to comply with the specified requirements for the applicable control level in the existing 40 CFR part 63, subpart PP - National Emission Standards for Containers. Except for containers used for waste stabilization, these standards would require that you manage the extracted material in containers that use covers according to the requirements specified in the proposed rule. Should affected

containers be used for a waste stabilization process, containers would be required to be vented to a control device.

Application of the container standards and the various levels of control is illustrated in the following example. In the situation where contaminated soil (i.e., the remediation material in this case) is excavated and placed in a dump truck (i.e., a container under the definitions used in the proposed rule), the truck containing the soil would be required to meet Level 1 controls if the VOHAP concentration is equal to or greater than 500 ppmw and the criteria for Level 2 controls is not meet. If this were the case, as it likely would be in most remediation situations, then a cover such as tarp covering the remediation material would be adequate to meet the Level 1 control requirements. If the vapor pressure and VOHAP concentration were such that Level 2 controls were required then a more strenuous set of controls would apply.

3. Surface Impoundments

For each surface impoundment required to use air emission controls, you would be required to comply with

the existing 40 CFR part 63, subpart QQ - National Emission Standards for Surface Impoundments. Under this subpart, you must meet one of two options: (1) use a cover over the surface impoundment and vent through a closed-vent system to a control device; or (2) use a floating membrane cover designed and operated according to requirements specified in the proposed rule.

4. Oil-Water and Organic-Water Separators

For each oil-water or organic-water separator required to use air emission controls, you would be required to comply with the existing 40 CFR part 63, subpart VV - National Emission Standards for Oil-Water and Organic-Water Separators. Under this subpart, you must meet one of three options: (1) use a floating roof on the separator; (2) use a cover over the separator that is vented through a closed-vent system to a control device; or (3) use a pressurized separator designed and operated according to requirements specified in the proposed rule.

5. Material Transfer Systems

For each individual drain system required to use air emission controls, you would be required to comply with the existing 40 CFR part 63, subpart RR - National

Emission Standards for Individual Drain Systems. For transfer systems required to use air emission controls other than individual drain systems, you would be required to comply with one of three options: (1) use covers; (2) use continuous hard-piping; or (3) use an enclosure vented to a control device.

E. What are the standards for equipment leaks?

The proposed rule would establish work practice and equipment standards to control organic HAP emissions from leaks in pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, flanges and other connectors, and product accumulator vessels that either contain or contact a regulated material that is a fluid (liquid or gas) and has a total organic HAP concentration equal to or greater than 10 percent by weight. These work practice and equipment standards would not apply to equipment that operates less than 300 hours per calendar year. You would have the option of complying with the provisions of either 40 CFR part 63, subpart UU - National Emission Standards for Equipment Leaks - Control Level 1 or 40 CFR part 63, subpart UU - National Emission Standards for Equipment Leaks - Control Level 2. Both of these

subparts require you to implement a leak detection and repair program (LDAR) and to make certain equipment modifications.

F. What are the requirements for remediation material sent off-site?

Under the proposed rule, if you transfer remediation material containing organic HAP to another party, another facility, or receive it from another facility, this material would need to be managed according to the provisions of this subpart. In other words, if the material has a VOHAP concentration of 500 ppmw or more, as determined according to the procedure in the proposed rule, then at the new facility this material would need to be managed in units that meet the air emission control requirements under the Site Remediation NESHAP for the applicable remediation material management unit type (i.e., tank, containers, etc.). Similarly, any treatment process used for the transferred remediation material would need to meet the process vent control requirements.

G. What are the general compliance requirements?

Under the proposed rule, you would be required to meet each applicable emission limitation and work practice standard in the proposed rule at all times,

except during periods of startup, shutdown, and malfunction. You must develop and implement a written startup, shutdown, and malfunction plan for your site remediation according to the provisions of 40 CFR 63.6(e)(3).

Also with regard to compliance, it is important to note that under the provisions of the proposed rule, if an affected source (i.e., a remediation management or treatment unit) is subject to and complying with the control requirements under another part 61 or part 63 standard (e.g., has either installed air emission controls or has taken other actions to reduce HAP emissions to levels dictated by the other part 61 or part 63 standards) then the affected source is exempt from the control requirements of the proposed rule in 40 CFR 63.7883 through 40 CFR 63.7933. However, the source must be controlling air emissions under the other rule; the exemption under the proposed rule does not apply if the source is merely exempt from the control requirements of the other rule and has not taken action to limit HAP emissions.

H. What are the testing and initial compliance requirements?

Initial compliance for process vents would be demonstrating that either: 1) the total organic HAP emissions from all affected process vents is less than 1.4 kg/h and 2.8 Mg/yr; or 2) the total organic HAP emissions from all of the affected process vents is reduced by at least 95 weight percent.

Initial compliance for remediation material units would be demonstrating that either: 1) the VOHAP concentration of the remediation material managed in the unit is below the 500 ppmw action level; or 2) the unit meets all applicable air emission control requirements for the unit. If a control device is used, initial compliance is determined by either: 1) performing a performance test according to 40 CFR 63.7 of the general provisions and using specific EPA reference test methods; or 2) performing a design evaluation according to procedures specified in the proposed rule. You also must establish your operating limits for the control device based on the values measured during the performance test or determined by the design evaluation.

I. <u>What are the continuous compliance provisions?</u>

To demonstrate continuous compliance with the applicable emission limitations and work practice

standards under the proposed rule, you would perform periodic inspections and continuous monitoring of certain types of air pollution control equipment you use to comply with the proposed rule. In those situations when a deviation from the operating limits specified for a control device is indicated by the monitoring system or when a damaged or defective component is detected during an inspection, you must implement the appropriate corrective measures.

To demonstrate continuous compliance with an emission limitation for a given source, you would continuously monitor air emissions or operating parameters appropriate to the type of control device you are using to comply with the standard, and keep a record of the monitoring data. Compliance is demonstrated by maintaining each of the applicable parameter values within the operating limits established during the initial compliance demonstration for the control device.

There are different requirements for demonstrating continuous compliance with the work practice standards, depending on which standards are applicable to a given emission source. To ensure that the control equipment used to meet an applicable work practice standard is

properly operated and maintained, the proposed rule would require that you periodically inspect and monitor this equipment. When a cover is used to comply with a work practice standard, you must visually inspect the cover periodically and keep records of the inspections. In addition, for external floating roofs, seal gap measurements must be performed on the secondary seal once per year and on the primary seal every 5 years. Leak detection monitoring using Method 21 would be required for certain types of covers to ensure gaskets and seals are in good condition, and for closed-vent systems to ensure all fittings remain leak-tight. In general, annual inspection and leak detection monitoring of covers is proposed. Annual inspection and leak detection monitoring would be required for closed-vent systems. Any defects or conditions causing failures detected by an inspection or monitoring need to be promptly repaired and records of the repairs kept.

You would be allowed to use an alternative to the monitoring required by these proposed standards. If you choose to do so, you would be required to request approval for alternative monitoring according to the procedures in 40 CFR 63.8 of the General Provisions.

J. What are the notification, recordkeeping, and reporting requirements?

The proposed rule would require you to keep records and file reports consistent with the notification, recordkeeping, and reporting requirements of the General Provisions of 40 CFR part 63, subpart A. Two basic types of reports are required: initial notification and semiannual compliance reports. The initial notification report advises the regulatory authority of applicability for existing sources or of construction for new sources.

The initial compliance report demonstrates that compliance has been achieved. This report contains the results of the initial performance test or design evaluation, which includes the determination of the reference operating parameter values or range and a list of the processes and equipment subject to the standards. Subsequent compliance reports describe any deviations of monitored parameters from reference values; failures to comply with the startup, shutdown, and malfunction plan (SSMP) for control devices; and results of LDAR monitoring and control equipment inspections.

Records required under the proposed standards must be kept for 5 years, with at least 2 of these years being

on the facility premises. These records include copies of all reports that you have submitted to the responsible authority, control equipment inspection records, and monitoring data from control devices demonstrating that operating limits are being maintained. Records from the LDAR program and storage vessel inspections, and records of startups, shutdowns, and malfunctions of each control device are needed to ensure that the controls in place are continuing to be effective.

K. What are the implications of this NESHAP for Clean Air Act title V requirements?

1. What is the title V Program?

This program is a permit program established under title V of the CAA in 1990. A title V permit is intended to consolidate all of the air pollution control requirements into a single operating permit for a source's air pollution activities.

2. Under what circumstances am I required to obtain a title V permit for my remediation activity?

Title V requires all major sources to obtain permits (see 40 CFR 70.3, or 40 CFR 71.3). Major source status is triggered for a source under title V when actual emissions or potential to emit meets or exceeds certain

major source thresholds (see definition of major source at 40 CFR 70.2, or 40 CFR 71.2). Although a source subject to the Site Remediation MACT will be major for title V purposes based on emissions of HAP, title V also requires permits for sources that are major for other air pollutants, (e.g., the criteria pollutants). Sources that are subject to the Site Remediation MACT, by virtue of being major sources, will typically have to obtain an operating permit, if they don't already have one, or modify their existing permit under title V (either 40 CFR part 70 or 71). An option for avoiding major source status under title V for some sources that are not major prior to the remediation activity is voluntarily requesting practically-enforceable limitations (often operation or emissions-related) to reduce their potential to emit or actual emissions to levels below the major source thresholds. This option should be pursued through your permitting authority.

3. Who is responsible for obtaining the title V permit for a remediation activity?

Typically the party responsible for obtaining the title V major source permit will be either: (1) the owner or operator of the site remediation equipment or

activities, or (2) the owner or operator of the source already existing at the facility that is covered by another MACT source category activity (the other collocated source). The decision as to who should apply for the permit in any specific case will be made on a case-by-case basis (site-dependent) and should be evaluated in consultation with the permitting authority, however, normal practice will be to issue the permit to the entity that has common control of all activities at the facility. Under the definition of major source used for HAP in 40 CFR part 70 or 71, all activities within a contiguous area under common control will be aggregated (grouped) together as a single source to determine major source status. While the source is ultimately responsible for making these determinations, permitting authorities will commonly assist sources in this task. Also note that the question of who may be required to apply for the permit will likely be affected by the way that pre-construction review permits (also referred to as New Source Review or NSR permits) were issued to such sources. Initial NSR permits are required prior to the commencement of construction activities, while initial title V operating permits are required generally after

commencement of operations. Thus, permitting authorities are likely to follow decisions made in issuing NSR permits when looking at this question for title V purposes.

4. If I already have a title V permit, is a modification required for my remediation activity?

When there is a major source in a MACT source category that already has a title V operating permit, and a site remediation activity commences operation at the same facility and all activities at the facility are considered part of the same source (i.e., under common ownership and control), permitting authorities will require the previously issued operating permit to either be reopened or revised to reflect the new applicable requirements of the Site Remediation MACT. Permit reopening under 40 CFR 70.7(f), or 40 CFR 71.7(f), is required when a major source has a permit, there are 3 years or more left on the term of the permit, and we promulgate a new MACT standard (or other applicable requirement) that applies to the source. For such sources, if less than 3 years is left on the permit term, the State may generally wait until renewal to update the permit. On the other hand, modifications under 40 CFR

70.7(e), or 40 CFR 71.7(e), are required when a source has a permit and the source becomes subject to the MACT standard after the standard is promulgated (in most cases, these will be significant modifications under 40 CFR 70.7(e)(4), or 40 CFR 71.7(e)(3), but in some circumstances other permit modification procedures may apply).

5. If I have an existing title V permit, do I have to wait for completion of the permit modification before I begin the remediation activity?

In general, when site remediation activities are not addressed or prohibited by your existing operating permit, you may commence such activities at any time prior to the finalization of any formal title V permit modification procedures. However, when permit modification is required due to a new remediation activity and the new activity conflicts with (or is expressly prohibited by) the existing permit terms or conditions, the permit must be formally revised prior to commencing operation of such activities or you will be in violation of the permit prior to their revision.

6. The increase in potential-to-emit from a remediation activity will make my facility a major source overall,

but only for a limited time. Am I required to get a title V permit? What activities can occur before my title V permit is issued?

All major sources are required by 40 CFR 70.5(a)(1), or 40 CFR 71.5(a)(2) to submit their permit application no later than 12 months after they commence operation, but State law could require it sooner. After that, 40 CFR 70.7(a)(2), or 40 CFR 71.7(a)(2), allows permitting authorities up to 18 months to issue the final permit, but State law may also require issuance sooner.

Major sources that expect to operate for 12 months or more obviously must submit a permit application in all cases. Sources that expect to operate less than 12 months (or whatever deadline the State sets) may decide not to prepare a permit application, at the risk of operating past that deadline without submitting the required application. Also note that policies concerning the permitting of such sources may vary from State to State; so it is also a good idea to contact your permitting authority concerning the steps necessary to fulfill your obligations under the operating permit program.

7. What are the requirements for remediation equipment

that moves from one facility to another after completing each remediation activity?

Permitting authorities will decide how to permit such sources on a case-by-case basis, taking into account the particular circumstances known to them at that time. Many permitting authorities have policies or specific rules to address the permitting of portable sources, or other activities of short-duration, which are usually those expected to operate less than 1 or 2 years at any one location, and which are expected to operate in more than one location during a typical 5-year permit term. In addition, 40 CFR 70.6(e), or 40 CFR 71.6(e), addressing temporary sources, allows permitting authorities to issue a single operating permit for a major source that will operate in multiple locations during its 5-year permit term.

8. My facility’s current operations are covered by an existing title V permit, do I have the option of obtaining a separate title V permit for a new remediation activity?

In some cases, permitting authorities have authority to issue multiple operating permits to a single source, and if this is the case, they may agree to issue a

separate permit for the remediation activities. Although title V permits are typically thought of as a single permit that covers all the applicable requirements and all emissions units at a single source, the CAA allows permitting authorities to issue multiple permits to a single source. Such issuance would be consistent with title V as long as the assemblage of permits for a single major source addresses all applicable requirements at all subject emission units (in the same way that a single major source permit would).

L. What are the implications for this NESHAP for Clean Air Act New Source Review Requirements?

This NESHAP does not change any of the existing requirements under the NSR program. The questions and answers within this section summarize the NSR program and a source's general requirements under this program.

1. How is the NSR program structured?

The NSR program is divided into three parts: Nonattainment NSR for major sources, Prevention of Significant Deterioration (PSD) for major sources, and minor source NSR. The term "NSR" is used to refer to both the overall program, and to the requirements that apply in nonattainment areas (e.g., nonattainment NSR).

Nonattainment NSR applies to large facilities (major sources) located in areas where air quality is unhealthy to breathe – i.e. where the NAAQS for a CAA pollutant is not being met. These areas are called nonattainment areas. (Note: the term major source as it applies to the NSR program is discussed in detail in the July 23, 1996 Federal Register (61 FR 38429)). Nonattainment NSR for major sources of certain pollutants also applies in the federally designated ozone transport region (OTR), which consists of eleven northeastern states.[1] Prevention of significant deterioration (PSD) applies to major sources located in areas where air quality is currently acceptable – i.e. where the NAAQS for a CAA pollutant is being met. These are called attainment areas. Minor NSR applies to smaller sources and modifications that contribute to air pollution throughout the country.

2. Who runs the NSR and PSD programs?

The NSR program is administered by State and local air pollution permitting authorities, who are responsible for issuing all permits. Each state or local permitting

[1] Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Washington, D.C.

authority is required to incorporate NSR and PSD requirements into its State Implementation Plan (SIP), which is the State's plan to ensure progress toward, or maintenance of, attainment of all NAAQS. A State's PSD program may be SIP-approved or delegated. If the State designs its own program, EPA may approve it so long as it meets the criteria listed in Federal PSD regulations. Otherwise, the State may take delegation of the Federal PSD program, as it is written in the Federal PSD regulations. A State's nonattainment NSR program must be a SIP-approved program meeting the criteria listed in Federal NSR regulations.

3. Who is subject to major NSR and PSD requirements?

No one may begin constructing a new major stationary source or undertake a major modification at an existing stationary source without obtaining an NSR or PSD permit from the permitting authority. The new major source would not need an NSR or PSD permit unless it had new potential emissions that qualify as major. Moreover, an existing major source that undertakes a major modification is subject to NSR or PSD only if there is a significant increase in emissions.

4. Do sources always need an NSR permit for a

construction project?

Sources may avoid major NSR or PSD altogether by not increasing their emissions (e.g., by making changes that do not increase emissions, by installing controls on one part of the facility to offset increases at another part of the facility, or by agreeing to emission limits in their permit). Alternatively, facilities may comply with NSR by including modern controls in conjunction with an upgrade project or a new facility.

5. How long does the process take to complete?

The EPA estimates that the average time it takes to get a major NSR or PSD permit is about 7 months from receipt of the permit application.

6. When NSR or PSD applies, what must sources do?

a. Major Nonattainment NSR in Nonattainment Areas

New and existing major sources undertaking major modifications subject to nonattainment NSR must apply state of the art emission controls that meet the lowest achievable emissions rate (referred to as LAER). The LAER is based on the most stringent emission limitation in any State’s SIP, or achieved in practice by the source category under review.

To get a permit, the applicant must also offset its

emission increase by securing emissions reductions offsets from other sources in the area. The amount of the offset must be as great or greater than the new increase, and is based on the severity of the area's nonattainment classification. The more polluted the air is where the source is locating or expanding, the greater the emissions reductions required to offset the proposed increase. Offsets must be real reductions in emissions, not otherwise required by the CAA, and must be enforceable by the EPA.

Each applicant must also conduct an analysis of "alternative sites, sizes, production processes, and environmental control techniques...(that) demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs of its location, construction, or modification." The applicant must also certify that all other sources operating within the State are operating in compliance with the CAA and SIP requirements. Finally, the public must be given adequate notice and opportunity to comment on each permit application.

b. Prevention of Significant Deterioration in Attainment Areas

New major sources and existing sources that undertake major modifications that are subject to PSD must apply best available control technology (BACT). The BACT determination ultimately made by the permitting authority allows for a consideration of energy, environmental, and economic impacts and other costs on a case-by-case basis that is specific to the facility's situation. The permitting authority then specifies an emission limit for the source that represents BACT.

Each PSD applicant must also perform an air quality analysis to demonstrate that the new emission increase will not cause or contribute to a violation of any applicable NAAQS or result in a significant deterioration of the air quality. Finally, each applicant must also conduct an analysis to ensure that the increase does not result in adverse impact on air quality related values, including visibility, that affect designated Class I areas, such as wilderness areas and national parks.

c. Minor NSR

For sources not otherwise covered by major PSD or NSR, the CAA requires permitting authorities to regulate construction and modifications to ensure that the NAAQS are achieved. State programs have widely varying

requirements. Some are comprehensive, while others provide numerous exclusions. Some require a technology review, in addition to air quality modeling.

III. Rationale for Selecting the Proposed Standards

A. What is the scope of the source category to be regulated?

As we discussed in section I.A of this preamble, site remediation is one of the approximately 170 categories of sources included on the NESHAP source category list. The facilities included within the scope of this source category include sites at which the cleanup is required to comply with requirements under a State regulatory program as well as sites at which cleanups are performed on a voluntary basis. In section II.A of this preamble, we discuss how statutory directives under RCRA and CERCLA direct us to address the control of air emissions from certain site remediations and that those activities under the RCRA Corrective Action and CERCLA authorities are exempt from the requirements of the proposed rule.

B. How did we select the pollutants to be regulated?

The specific chemicals, compounds, or groups of compounds designated by Congress to be HAP are listed in

CAA section 112(b). Included on the list are organic and inorganic chemicals. From this list of HAP, we selected the specific HAP to be regulated under this NESHAP for site remediations.

1. Organic HAP

Organic HAP potentially can be emitted from site remediations at many different types of facilities. We considered but decided not to select all of the organic HAP listed under section 112(b) for regulation in the Site Remediation NESHAP. Instead, we decided to be consistent with the approach we used for the OSWRO NESHAP as well as other NESHAP promulgated for source categories with large diversity in the organic chemical constituents present in the materials managed at any given facility and instead regulate on the basis of a surrogate that reasonably ensures MACT control of the organic HAP present. See National Lime v. EPA, 238 F. 3d, (D.C. Cir. 2000, upholding use of surrogates in establishing MACT standards).

When we developed the organic HAP list for the OSWRO NESHAP, we evaluated each organic chemical or chemical group listed as a HAP in CAA section 112(b) with respect to its potential to be emitted from a waste management or

recovery operation. The criteria used to characterize and evaluate emission potential was based on a chemical constituent's Henry's law constant, evaluation of the aqueous and organic volatility characteristics of the chemical, and the ability of the analytical test methods to quantitate the chemical. Based on our evaluation, we selected 98 specific organic HAP compounds or compound groups to be regulated under the proposed rule (Table 1 to 40 CFR part 63, subpart DD.).

Although the OSWRO NESHAP, by an exclusion under the rule applicability, does not apply to units managing wastes from site remediations, the data base that we used to select the list of organic HAP for the OSWRO NESHAP included remediation wastes sent to hazardous waste TSDF. We believe that this data base is also representative of the range of organic HAP chemicals having the potential to be emitted from the sites requiring cleanup of media contaminated with volatile or semi-volatile organics and other remediation material. Therefore, we are proposing that same list of organic HAP used for the OSWRO NESHAP also be used for the Site Remediation NESHAP. This list is presented in Table 1 to proposed subpart GGGGG. We request comment on the proposal to use this list of

organic HAP for the Site Remediation NESHAP.

2. Inorganic HAP

The types of inorganic compounds listed as HAP in CAA section 112(b) that are most likely to be in contaminated media requiring remediation are heavy metals (i.e., antimony, arsenic, beryllium, cadmium, chromium cobalt, lead, manganese, mercury, nickel, and selenium). A widely used remediation approach for cleanup of soils, sludges, or sediments contaminated with heavy metals involves excavating the contaminated media, treating the remediation material in a solidification or stabilization process, and disposing of the treated material in an appropriate landfill (which may be on-site or an off-site facility). Metals in the contaminated soil are immobilized by the added binder material used for the fixation process. In situations where groundwater is contaminated with heavy metals, site remediation typically involves extracting the groundwater by pumping it to the surface and then removing the metals by a physical or chemical process (e.g., precipitation, ion exchange). The metals remain in the wet precipitate or other extraction media and are not released to the atmosphere.

For some site remediations involving the cleanup of media containing both metals and organic contaminates, the extracted remediation waste is burned in an incinerator or other combustion device. Metal HAP contained in the remediation waste vaporize at high combustion temperatures or become airborne as fine particles and can remain in combustion gases in either a gaseous or particulate form. Any metal HAP contained in the combustion gases that is not captured and removed by a control device is emitted to the atmosphere.

Based on our information regarding the cleanup of media contaminated with metals or other inorganic HAP, many of the remediation techniques used do not release the inorganic HAP to the atmosphere. In cases where remediation material containing inorganic HAP is burned in an incinerator, the incinerator used must already meet air standards under the CAA and RCRA that limit organic, particulate matter, metals, and chloride emissions. (See, e.g. 40 CFR part 263, subpart EEE (MACT standards for hazardous waste combustion sources).) Therefore, we are proposing that metals and other inorganic compounds listed as HAP in CAA section 112(b) not be regulated by this Site Remediation NESHAP. We are specifically

requesting comment on this proposal and, in particular, would appreciate receiving data regarding the sources and quantity of inorganic HAP emissions from site remediations and available control technologies applicable to the sources in order to either support or revise our decision not to regulate inorganic HAP emissions under this NESHAP.

C. How did we select the affected source to be regulated?

For the purpose of implementing a NESHAP under 40 CFR part 63, “affected source” is defined to mean the stationary source, or portion of a stationary source that is regulated by a relevant standard or other requirement established pursuant to section 112 of the CAA. Each relevant standard is to designate the affected source for the purposes of that standard. Within a source category, we must decide which of the sources of HAP emissions (i.e., emission points or groupings of emission points) to which the proposed rule applies.

One option for the Site Remediation NESHAP is to define the affected source as the entire set of activities performed for a given site remediation such as the cleanup of contaminated soil or the cleanup of

contaminated groundwater. The affected source would consist of the mix of emission points for the sequence of activities in which the contaminated media or other remediation material is extracted (if needed), stored, conveyed, treated, or, otherwise handled at the facility. Under this broad definition option, a separate emission limitation for MACT would be determined for the entire group of emission points associated with a site remediation to clean up the contaminated soil. Another emission limitation for MACT would be determined for the entire group of emission points associated with a site remediation to clean up the contaminated groundwater. Unlike the NESHAP source categories that can be readily characterized by one or several standardized process configurations which are used throughout the industrial segment representing the source category, the operations used for all contaminated soil or contaminated groundwater remediations cannot. The activities, equipment configurations, and sequencing of operations used are not consistent from site remediation to site remediation. Therefore, we concluded that this option is not an appropriate approach for defining the affected sources for the Site Remediation NESHAP.

Another option we considered is to define the affected source in terms of common groupings of processes and equipment used for management and cleanup of contaminated media and other remediation materials (i.e., tanks, containers, process vents, and equipment leaks). Under this option, MACT is determined for each emission source group. We believe that this option is an appropriate way to define the affected source for the Site Remediation NESHAP. Designating the affected source to be a group of similar emission point types ensures that air emission controls of equivalent performance are applied at the same time to all of the units used to manage a remediation material stream. Also, this approach to defining sources is consistent with other NESHAP for related waste management operations (e.g., the OSWRO NESHAP). Therefore, for the Site Remediation NESHAP, we determined separate MACT for common groups of emission point sources.

The first group of common emission points designated to be an affected source for the Site Remediation NESHAP is the group of pipes, stacks, or ducts that allow the passage of gases, vapors, or fumes containing organic HAP to the atmosphere from any treatment process used at the

facility to remove, destroy, or otherwise transform the hazardous substances in remediation material. These pipes, stacks, and ducts are collectively referred to as process vents in the proposed rule. The process vent may be either associated with an in situ process (e.g., soil vapor extraction used to treat contaminated soil) or ex situ process (e.g., air stripper used to treat contaminated ground water, or thermal desorption unit used to treat contaminated soil). For the purposes of applying the standards, a process vent is neither a vent that operates as a safety device nor a stack or duct used to exhaust combustion products from a boiler, furnace, incinerator, or other enclosed combustion device that is being used to treat a remediation waste or material. If these combustion devices are being used as an air pollution control device to control air emissions then the vent could be subject to the standards.

The next group of common emission points designated to be an affected source for the Site Remediation NESHAP is the group of units used at the facility which handle, temporarily store, or otherwise manage the remediation material once it has been extracted from the ground. This group of sources includes units that treat extracted

contaminated media but do not use a process vent (e.g., a tank used for biological degradation treatment of contaminated groundwater). These units are tanks, containers, surface impoundments, oil-water and organic-water separators, individual drain systems, and other stationary transfer or conveyance. The units regulated under this affected source designation are collectively referred to as remediation material management units in the propose rule.

A third group of common emission points designated to be an affected source for the Site Remediation NESHAP is the group of equipment components prone to emitting organic HAP as a result of liquid or vapor leaks. This group of equipment consists of pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves and lines, valves, connectors, and instrumentation systems that contain or contact remediation material once it has been extracted from the ground.

We have identified two other types of remediation activities that may emit organic HAP but do not belong in any of the above three affected source groups. These activities are the excavation of contaminated soil and

land treatment process for contaminated soils, sediments, and sludges. Excavation of contaminated soil involves the use of heavy machinery to dig up the soil. The excavated material is then either placed directly into dump trucks for transport offsite or moved to another location at the facility for storage or treatment. Land treatment processes are open biodegradation processes in which the contaminated soil, sediment, or sludge is excavated, re-applied in shallow layers on the ground surface, and periodically turned over or tilled to aerate the applied material. The organic contaminants are neutralized, destroyed or transformed by biological actions of microbes in the materials.

Our information indicates that there are no add-on controls currently in use to control organic emissions from these activities, nor are we aware of any practical work practices or process modification that can be implemented to reduce organic HAP emissions from these activities. Therefore, we are proposing not to develop standards under this NESHAP for either excavation operations or land treatment activities. We specifically request comment on the technical and practical feasibility of controlling HAP emissions from these

remediation activities, actual HAP emissions rates that occur, and the costs of applying any applicable controls.

D. How did we determine MACT for the affected sources?

Section 112(d)(3) of the CAA specifies that the MACT standards for existing sources cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources for categories and subcategories with 30 or more sources. There are many more than 30 site remediations being conducted nationwide. Therefore, the MACT floor for existing sources at site remediations is established by the best-performing 12 percent of existing sources.

We reviewed our information for site remediations to find an approach for identifying the best-performing 12 percent of existing sources, arraying the data for each category of emission point. Our data includes individual existing sites where remediation activities use add-on air emission controls (e.g., venting air strippers through carbon adsorbers, management of remediation wastes in covered tanks). However, there are remediation sites in our data base at which no air emission controls are used. The use of air emission controls at a given location depends on a combination of factors including,

but not limited to, the type and extent of contamination requiring cleanup, the nature of the site remediation activities used for the cleanup, and the requirements imposed by the agency having oversight of the site remediation.

Determining a MACT floor based on use of control measures other than add-on controls (e.g., fuel switching, material substitution or reformulation, process modification, material recycling within the process) is not technically appropriate for, or applicable to, the site remediation source category. This source category addresses HAP emissions that are released from the cleanup of pre-existing environmental contamination problems. By the time the need for site remediation has been identified, the opportunity has passed for applying any pollution prevention or source reduction techniques.

The use of add-on air emission controls by some existing site remediation activities indicates that the average emission limitation being achieved by the best performing 12 percent of these sources is at some level above applying no controls (i.e., the emission limitation achieved by best performing 12 percent of the sources is

greater than zero). The difficulty we are presented with is not having the information to determine average emission limitation achieved by the best performing 12 percent of existing sources at site remediations nationwide. We do not have comprehensive nationwide facility survey data by which we can state, with a reasonable level of confidence, that the sources for which we do have air emission control data do indeed represent the top 12 percent of the best performing existing sources nationwide. These sources may represent well more than the top 12 percent but there also is the possibility that the sources represent less than the top 12 percent. We do not have the data needed to definitively calculate the statistical distribution of air emission controls used at existing remediation sites nationwide.

Obtaining nationwide counts of existing site remediation activities is not a trivial task given the uniqueness of the site remediation source category. Many site remediations are voluntary actions and are not reported for inclusion in existing EPA site remediation data bases. Furthermore, some existing site remediations are performed to address a unique contamination situation

and may not be relevant to site remediations that are performed in the future. A comprehensive information collection survey to collect the needed data would require very significant time and resource commitments by both us and the survey respondents, and would not necessarily provide us with all of the information we need. In addition, it is not clear that on-going remediation activities have the available data needed to adequately characterize the source category.

Given the uniqueness of the site remediation source category, the extent of information currently available to us, and the complexities of gathering additional meaningful information, we decided to forgo statistically computing an emission limitation or identifying a specific control technology that represents the MACT floor for site remediations. The MACT floor for existing affected sources is some level of air emission control beyond no controls. Because the provisions of section 112 allow us to select MACT for a source category that is more stringent than the MACT floor (provided that the control level selected is technically achievable and that we consider the cost of achieving the emissions reductions, any non-air quality health and environmental

impacts, and energy requirements associated with the selected control level (CAA section 112(d)(2)), we chose to select the MACT technology directly.

To select a MACT technology from alternatives beyond the MACT floor for each affected source, we looked at the types of air emission controls required under national air standards for sources similar to those sources that potentially may be associated with site remediations. These air standards are NESHAP for other source categories, particularly the OSWRO NESHAP under 40 CFR part 63, subpart DD, and the air standards for RCRA hazardous waste treatment, disposal, and facilities under subparts AA, BB, and CC in 40 CFR parts 264 and 265 (RCRA Air Rules). The control levels established by the emission limitation and work practices we are proposing here are being implemented at existing sources subject to these similar rules; this demonstrates that the control levels are technically achievable.

As stated in the previous paragraph, these control requirements and action levels already exist in either the RCRA Air Rules or the OSWRO NESHAP, or both. Given that these existing rules specify control requirements for sources similar to those comprising the affected

source group for the Site Remediation NESHAP, and that sources already regulated by these existing standards will likely manage and/or treat remediation material regulated by the Site remediation NESHAP also, we believe that the requirements within these existing rules represent industry practice for remediation activities and therefore MACT for the Site Remediation NESHAP. Nevertheless, we recognize that the existing standards were designed for controlling emissions from ongoing industrial activities that would continue for many years, rather than for limited-duration activities such as site remediations. The Agency requests comment on the appropriateness of using the existing standards for limited-duration site remediations.

E. How did we select the format of the proposed standards?

The proposed standards for the Site Remediation NESHAP consist of a combination of several formats: numerical emission limits and operating limits, equipment standards, and work practice standards. We selected the formats for each of the proposed standards to be consistent with the formats used in other NESHAP for similar organic HAP sources.

F. How did we select the testing and initial compliance requirements?

The Site Remediation NESHAP would control three different groups of emission points: process vents, remediation material management units, and equipment leaks. The control technologies and work practices used to control these emission point groups would have different testing and initial compliance requirements. The methods proposed for testing and for demonstrating initial compliance with the proposed standards are consistent with those in other NESHAP that require using these same control technologies and work practices.

We selected the performance testing requirements to demonstrate compliance with the control device emission limits based on the use of the applicable EPA test methods. We propose in the proposed rule to use EPA Methods 1, 1A, 2, 2A, 2C, 2D, 3, 4, 9, 18 (total organic HAP or total organic compounds), 22, 25, 25A, 305 and 316 of 40 CFR part 60, appendix A, and SW 846 9095A. Consistent with the National Technology Transfer and Advancement Act (NTTAA), we conducted searches to identify potential voluntary consensus standards that could be used in place of these EPA methods. As

discussed further in section V.H of this preamble, no applicable voluntary consensus standards were identified as practical alternatives to the EPA Methods included in the proposed rule.

G. How did we select the continuous compliance requirements?

Continuous monitoring is required under each NESHAP so that we can determine whether a source remains in compliance following the initial compliance determination. When determining appropriate monitoring options, we considered the availability and feasibility of a number of monitoring strategies ranging from continuous emission monitoring to process and control device parameter monitoring.

Monitoring of control device operating parameters is considered most appropriate for many other similar emission sources and, therefore, we have included this as the primary monitoring approach in these proposed standards. We selected operating parameters for the following types of control devices that are reliable indicators of control device performance: thermal and catalytic oxidizers, flares, adsorbers, condensers, boilers, incinerators, and process heaters. In general,

we are proposing selected parameters and monitoring provisions that were included in the OSWRO NESHAP. Sources would monitor these parameters to demonstrate continuous compliance with the emission limits and operating limits.

H. How did we select the notification, recordkeeping, and reporting requirements?

The required notifications and other reporting are based on the General Provisions in subpart A of 40 CFR part 63. The initial notification and the semiannual compliance reports include information on the remediation material and affected site remediation activities, and they require any changes to this information to be reported in subsequent reports. Similarly, records are required that will enable an inspector to verify the facility's compliance status. Due to the nature of control devices that would be installed on site remediation processes and the emissions being controlled, we have determined that control device parameter monitoring is appropriate in this circumstance. The required records and reports are necessary to allow the regulatory authority to verify that the source is continuing to comply with the standards.

IV. Summary of Environmental, Energy, and Economic Impacts

A. What are the emissions reductions?

We estimated nationwide organic HAP emissions from the site remediations potentially subject to the proposed rule based on the information available to us including remediation waste quantity and treatment practice data for the year 1997 and earlier. Nationwide organic HAP emissions from regulated sources are estimated to be approximately 1,140 Mg/yr. Nationwide VOC emissions from regulated sources are estimated to be approximately 7,360 Mg/yr. (Although not all VOC are organic HAP, we may permissibly note the air benefits from controlling non-HAP pollutants such as VOC when considering a MACT standard. (See S. Rep. 101-228, 101st Cong. 1st sess. 172) We estimate that implementation of the proposed rule would reduce these nationwide air emissions by approximately 50 percent to 570 Mg/yr of HAP and 3,680 Mg/yr of VOC.

B. What are the cost impacts?

The nationwide total capital investment cost and the annual operating cost of the control equipment required to meet the proposed standards are estimated to be $17.6

million and $5.8 million per year, respectively. When fully implemented, the proposed rule is estimated to result in a total annual cost of $8.2 million per year.

C. What are the economic impacts?

The proposed rule would affect owners and operators of facilities, subject to the exceptions described in section I.A of this preamble, that are major sources of HAP emissions and at which a site remediation is conducted to clean up media or other material contaminated with any of the organic HAP substances listed in the proposed rule. Because of the nature of activities regulated by the source category, a comprehensive list of NAICS codes cannot be compiled for businesses or facilities potentially regulated by this action. As a result, the economic impact analyses focused on a set of industries from the 1997 Biennial Reporting System (BRS) database that were known to be large quantity generators of hazardous waste and who were remediating hazardous waste as part of a site remediation. We believe that the data provides an adequate overview of the potential impacts of the proposed rule. However we recognize that the actual industries directly impacted by the proposed rule in the

year the proposed rule is implemented and the costs incurred by these industries may differ somewhat from the set of industries identified in the 1997 BRS data and the costs assigned to these industries for the purposes of the economic analysis.

In general, we did not find evidence of significant impacts at the industry level. From the BRS data, over 80 industries were predicted to have annual compliance costs as a result of the proposed rule, and 15 industries accounted for 91 percent of the national compliance cost estimate of $8.16 million[2]. We employed an engineering or financial analysis to estimate impacts, which takes the form of the ratio of compliance costs to the value of sales (cost-to-sales ratio (CSR)). We calculated CSR for 12 industries and found all had CSR below 0.02 percent. The CSR are less than the lower quartile return on sales for all industries with profitability data available. We did not compute CSR for the remaining three industries because revenue data were not available.

---

[2] Value reported in $2000. For the economic impact analysis, EPA adjusted this estimate to $1997 using a cost factor (0.9753) developed from the Chemical Engineering Composite Plant Cost Index. Thus, the total annual compliance costs in $1997 is $7.96 million.

The CSR will likely overstate the impact on firms and understate the impact on consumers. The CSR assumes that there are no changes in the market as a result of the higher costs of production faced by the firms and that the firms continue to produce the same quantities, sell at the same price and absorb the full amount of the compliance costs.

Small business impacts were particularly difficult to assess because of the uncertainty over the facilities that will actually be impacted by the proposed rule. As a result, we concluded that sufficient data and related information did not exist to conduct a small business screening analysis.

D. What are the non-air quality environmental and energy impacts?

Compliance with the standards in the proposed rule requires using types of control equipment commonly in use to control organic emissions from process sources at many of the industrial facilities at which site remediations are most likely to occur. The non-air environmental and energy impacts associated with implementing the requirements of the proposed rule primarily are expected to result from the operation of these control devices.

No significant adverse water, solid waste, or energy impacts are expected as a result of the proposed rule.

V. Administrative Requirements

A. Executive Order 12866, Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the EPA must determine whether the regulatory action is “significant” and, therefore, subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Executive Order defines “significant regulatory action” as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the

rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

It has been determined that the proposed rule is not a "significant regulatory action" under the terms of Executive Order 12866 and is, therefore, not subject to OMB review.

B. Executive Order 13132, Federalism

Executive Order 13132, entitled “Federalism” (64 FR 43255, August 10, 1999), requires the EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” is defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”

Under Section 6 of Executive Order 13132, the EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance

costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or the EPA consults with State and local officials early in the process of developing the proposed regulation. The EPA also may not issue a regulation that has federalism implications and that preempts State law unless the EPA consults with State and local officials early in the process of developing the proposed regulation.

The proposed rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Thus, the requirements of section 6 of the Executive Order do not apply to the proposed rule.

C. Executive Order 13175, Consultation and Coordination with Indian Tribal Governments

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 6, 2000), requires the EPA to develop an

accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” “Policies that have tribal implications” is defined in the Executive Order to include regulations that have “substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes.”

Under section 5(b) of Executive Order 13175, EPA may not issue a regulation that has tribal implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by tribal governments, or EPA consults with tribal officials early in the process of developing the proposed regulation. Under section 5(c) of Executive Order 13175, EPA may not issue a regulation that has tribal implications and that preempts tribal law, unless the Agency consults with tribal officials early in the process of developing the proposed regulation.

The EPA has concluded that the proposed rule may

have tribal implications since site remediation activities could be conducted on tribal lands. We do not have any information identifying specific remediation activities being conducted at this time. However, it will neither impose substantial direct compliance costs on tribal governments, nor preempt State law. Thus, the requirements of sections 5(b) and 5(c) of the Executive Order do not apply to the proposed rule.

Consistent with EPA policy, EPA nonetheless has made attempts to invite tribal representatives to participate in the rulemaking activities early in the process of developing this proposed rule to permit them to have meaningful and timely input into its development. We have contacted tribal representatives and groups directly to notify them of this proposed rule development activity and to solicit their participation. Despite these efforts, EPA has not been contacted by tribal representatives to participate in the rulemaking process to date.

In the spirit of Executive Order 13175, and consistent with EPA policy to promote communications between EPA and tribal governments, EPA specifically solicits comment on the proposed rule from tribal

officials.

D. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that the EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the proposed rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the EPA.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. The proposed rule is not subject to Executive Order 13045 because it is based on technology performance and not on health or safety risks. No children's risk analysis was performed because no alternative technologies exist that would provide greater

stringency at a reasonable cost. Furthermore, the proposed rule has been determined not to be "economically significant" as defined under Executive Order 12866.

E. Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

The proposed rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

F. Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in aggregate, or by the private sector, of $100 million or more in any 1 year. Before promulgating

an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation of why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the

regulatory requirements.

The EPA has determined that the proposed rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any 1 year. The maximum total annual cost of the proposed rule for any year has been estimated to be about $23.4 million. Thus, today's proposed rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, the EPA has determined that the proposed rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's proposed rule is not subject to the requirements of section 203 of the UMRA.

G. Regulatory Flexibility Act (RFA) as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

Under the Regulatory Flexibility Act, the Agency must prepare a Regulatory Flexibility Analysis unless the Administrator certifies that the rule, if promulgated, will not impose a significant economic impact on a

substantial number of small entities. The Courts consistently have held that the provisions of the RFA apply only with respect to small entities that are subject to the proposed rule. The proposed rule sets minimum standards to be met when parties engage in future site remediation activities, but it does not itself require any party to undertake such activities. States may choose to direct a party to undertake site remediation, or parties may undertake remediation activities voluntarily. Today's action places no requirement on any party to initiate site remediation activities. The EPA anticipates that parties that undertake site remediation activities generally will do so voluntarily and that the impact of the proposed rule on those parties would not be significant. Further, because States and other parties will decide whether to undertake site remediation activities, it is extremely difficult, if not impossible, to predict how many or what types of small entities will undertake such activities. In addition, the proposed rule is structured to avoid impacts on small businesses. The proposed rule specifically excludes from its scope remediation activities conducted at gasoline stations, farm sites and

residential sites (on the ground that these remediation activities would not exceed the threshold for major sources). Moreover, the proposed rule would apply only to remediation sites located at a facility that is a major source under the CAA and engages in a "MACT activity" (defined as a non-remediation activity covered in the MACT list of major source categories pursuant to CAA section 112 (c)). Such sources tend to be large businesses. The proposed rule also contains emissions thresholds that are not likely to apply to small businesses. For example, the proposed rule exempts sources where the total annual quantity of HAP contained in all extracted remediation material at the facility is less than 1 Mg/yr. For these reasons, I certify that the rule, if promulgated, will not impose a significant economic impact on a substantial number of small entities.

H. Paperwork Reduction Act

We will submit the information collection requirements in the proposed rule for approval to the Office of Management and Budget under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. An Information Collection Request (ICR) document has been prepared by

EPA (ICR No. 2062.01) and you may obtain a copy from Susan Auby by mail at U.S. EPA, Office of Environmental Information, Collection Strategies Division (2822T), 1200 Pennsylvania Avenue, NW, Washington, DC 20460, by e-mail at auby.susan@epa.gov, or by calling (202) 566-1672. A copy may also be downloaded off the Internet at http://www.epa.gov/icr. The information requirements are not effective until OMB approves them.

The information requirements are based on notification,
recordkeeping, and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414). All information submitted to the EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to EPA policies set forth in 40 CFR part 2, subpart B.

The proposed rule would require maintenance inspections of the control devices but would not require any notifications or reports beyond those required by the

General Provisions in subpart A to 40 CFR part 63. The recordkeeping requirements require only the specific information needed to determine compliance.

The annual monitoring, reporting, and recordkeeping burden to affected sources for this collection (averaged over the first 3 years after the effective date of the promulgated rule) is estimated to be 341,737 labor-hours per year, with a total annual cost of $17.7 million per year. These estimates include a one-time performance test and report (with repeat tests where needed), one-time submission of an SSMP with semiannual reports for any event when the procedures in the plan were not followed, semiannual compliance reports, maintenance inspections, notifications, and recordkeeping.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any

previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15. Comments are requested on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. By U.S. Postal Service, send comments on the ICR to the Director, Collection Strategies Division, U.S. EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St., N.W., Washington, DC 20503, marked "Attention: Desk Officer for EPA".; or by courier, send comments on the ICR to the Director, Collection Strategies Division, U.S. EPA (2822T), 1301 Constitution

Avenue, NW, Room 6143, Washington, DC 20460 (202) 566-1700. Include the ICR number in any correspondence. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after [INSERT DATE OF PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER], a comment to OMB is best assured of having its full effect if OMB receives it by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER]. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

I. National Technology Transfer and Advancement Act

Under section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA) (Public Law No. 104-113, all Federal agencies are required to use voluntary consensus standards (VCS) in their regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. The NTTAA requires Federal agencies to provide Congress,

through annual reports to OMB, with explanations when an agency does not use available and applicable VCS.

The proposed rulemaking involves technical standards. The EPA proposes in the proposed rule to use EPA Methods 1, 1A, 2, 2A, 2C, 2D, 3, 4, 9, 18 (total organic HAP or total organic compounds), 22, 25, 25A, 305 and 316 of 40 CFR part 60, appendix A, and Method 9095A in SW 846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." Consistent with the NTTAA, EPA conducted searches to identify VCS in addition to these EPA methods. No applicable VCS were identified for EPA Methods included in the proposed rule.

The search for emissions measurement procedures identified 12 VCS as potential alternatives to the EPA methods specified in the proposed rule. Following further evaluation, the EPA determined that ten of these 12 standards identified for measuring emissions of HAP or surrogates subject to emissions standards in the proposed rule were impractical alternatives to EPA test methods for the purposes of the proposed rule. Therefore, the EPA does not intend to adopt these standards. The reasons for the determinations of these nine methods are discussed below.

The standard ISO 10780:1994, “Stationary Source Emissions – Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts,” is impractical as an alternative to EPA Method 2 in the proposed rule. This standard, ISO 10780:1994, recommends the use of L-shaped pitots, which historically have not been recommended by EPA because the S-type design has large openings which are less likely to plug up with dust.

The standard ASTM D3464-96, “Standard Test Method Average Velocity in a Duct Using a Thermal Anemometer,” is impractical as an alternative to EPA Method 2 for the purposes of the proposed rule primarily because applicability specifications are not clearly defined, (e.g., range of gas composition, temperature limits). Also, the lack of supporting quality assurance data for the calibration procedures and specifications, and certain variability issues that are not adequately addressed by the ASTM standard limit EPA’s ability to make a definitive comparison of the method in these areas.

The VCS ASTM D6060 (in review 2000), “Practice for Sampling of Process Vents with a Portable Gas Chromatograph,” is an impractical alternative for EPA

Method 18 for the purposes of the proposed rule because it lacks acceptance criteria for calibration, details on using other collection media (e.g., solid sorbents), and reporting/documentation requirements that are included in EPA Method 18.

The VCS ASTM D6420-99, ”Standard Testing Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (GC/MS),” also is an impractical alternative for EPA Method 18 for the purposes of the proposed rule. This method only detects 25 of the 98 specific organic HAP constituents subject to regulation by the proposed rule. The specific organic HAP composition of the remediation material to be cleaned up is often unknown and using a method to determine compliance with total organic HAP emissions limitations that only detects a narrow subset of the entire group of 98 organic HAP compounds subject to the proposed rule is not appropriate. Method 18 is the only method currently available to ensure that all 98 HAP compounds regulated by the proposed rule are accounted for in the computation of the total organic HAP emissions from an affected source. We request comment on our decision not to include ASTM method D6420-99.

Two VCS, EN 12619:1999 “Stationary Source Emissions-Determination of the Mass Concentration of Total Gaseous Organic Carbon at Low Concentrations in Flue Gases--Continuous Flame Ionization Detector Method” and ISO 14965:2000(E) “Air Quality-Determination of Total Nonmethane Organic Compounds-Cryogenic Preconcentration and Direct Flame Ionization Method,” are impractical alternatives to EPA Method 25A for the purposes of this rulemaking because the standards do not apply to solvent process vapors in concentrations greater than 40 ppm for EN 12619 and 10 ppm carbon for ISO 14965. Methods with whose upper limits are this low are too limited to be useful in measuring source emissions, which are expected to be much higher.

Four of the nine VCS are impractical alternatives to EPA test methods for the purposes of the proposed rule because they are too general, too broad, or not sufficiently detailed to assure compliance with EPA regulatory requirements: ASTM D3796-90 (Reapproved 1996), “Standard Practice for Calibration of Type S Pitot Tubes,” for EPA Method 2; ASME C00031 or PTC 19-10-1981 - Part 10, “Flue and Exhaust Gas Analyses,” for EPA Method 3; ASTM E337-84 (Reapproved 1996), “Standard Test Method

for Measuring Humidity with a Psychrometer (the Measurement of Wet- and Dry-Bulb Temperatures),” for EPA Method 4; and ASTM D3154-91, “Standard Method for Average Velocity in a Duct (Pitot Tube Method),” for EPA Methods 1, 2, 2C, 3, and 4. Two of the 11 VCS identified in this search were not available at the time the review was conducted for the purposes of the proposed rule because they are under development by a voluntary consensus body: ASME/BSR MFC 13M, “Flow Measurement by Velocity Traverse,” for EPA Method 1 (and possibly 2); and ASME/BSR MFC 12M, “Flow in Closed Conduits Using Multiport Averaging Pitot Primary Flowmeters,” for EPA Method 2. While we are not proposing to include these two VCS in today’s proposed rule, the EPA will consider the standards when they are finalized.

The EPA takes comment on the compliance demonstration requirements in the proposed rule and specifically invites the public to identify potentially-applicable VCS. The commenter should also explain why this regulation should adopt these VCS in lieu of or in addition to EPA’s standards. Emission test methods and performance specifications submitted for evaluation should be accompanied with a basis for the

recommendation, including method validation data and the procedure used to validate the candidate method (if a method other than Method 301, 40 CFR part 63, Appendix A was used).

Section 63.2406 and Table 5 of the proposed subpart GGGGG list the EPA testing methods and performance standards included in the proposed rule. Most of the standards have been used by States and industry for more than 10 years. Nevertheless, under §63.7(f) of subpart A of 40 CFR part 63, the proposed rule also allows any State or source to apply to the EPA for permission to use an alternative method in place of any of the EPA testing methods or performance standards listed in the proposed rule.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

_____
Dated:

_____
Christine Todd Whitman,
Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63, of the Code of the Federal Regulations is proposed to be amended as follows:

PART 63--[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401, et seq.

2. Part 63 is amended by adding subpart GGGGG to read as follows:

Subpart GGGGG - National Emission Standards for Hazardous Air Pollutants: Site Remediation

Sec.

What this Subpart Covers

Emissions Limitations and Work Practice Standards

General Compliance Requirements

Testing and Initial Compliance Requirements

Continuous Compliance Requirements

Notifications, Reports, and Records

Other Requirements and Information

Tables to Subpart GGGGG of Part 63

What this Subpart Covers

§63.7880 What is the purpose of this subpart?

This subpart establishes national emissions limitations and work practice standards for hazardous air pollutants (HAP) emitted from site remediation activities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emissions limitations and work practice standards.

§63.7881 Am I subject to this subpart?

(a) This subpart covers remediation activities within the site remediation source category, which excludes remediation at gasoline stations, farm sites and

residential sites.

(b) This subpart applies to you if you meet all of the criteria listed in paragraphs (1) and (2) of this section:

(1) You own or operate a site remediation activity that is collocated within a facility with other sources that are individually or collectively a major source of HAP emissions; and

(2) A MACT activity, as defined in §63.7942, is performed at the facility.

(c) Remediation means the cleanup of remediation material. For the purposes of this subpart, monitoring or measuring contamination levels through wells, or by sampling, is not considered to be remediation.

(d) A major source of HAP is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year. A source that is not a major source is an area source.

(e) You are not subject to the requirements of this

subpart if any of the criteria in paragraphs (d)(1) through (7) of this section apply.

(1) Your facility is an area source; or

(2) A MACT activity is not performed at your facility; or

(3) You are not conducting a remediation activity at your facility; or

(4) You do not have an affected source involved in any remediation activity conducted at the facility; or

(5) Your facility is a research and development facility, consistent with section 112(b)(7) of the CAA.

(6) The remediation is performed under the authority of the Comprehensive Environmental Response and Compensation Liability Act.

(7) Your remediation activity is a corrective action: (1) at a Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facility (TSDF) permitted either by the U.S. Environmental Protection Agency (EPA) or under a state program authorized by EPA under RCRA section 3006, (2) at an interim status TSDF conducted under an order imposed by EPA or a state program authorized for corrective action under RCRA section 3006, or (3) at any facility as required by

orders authorized under RCRA section 7003.

(f) You are not subject to the requirements of this subpart, except for the recordkeeping requirements in §63.7933, if all remediation activities at your facility subject to this subpart are completed and you have notified the Administrator in writing that all remediation activities subject to this subpart are completed. All future remediation activity meeting the applicability criteria in paragraph (b) of this section must comply with the requirements of this subpart.

§63.7882 What activities at my facility does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing remediation affected source. The emissions sources listed in paragraphs (b)(1) through (3) of this section located at a facility meeting the criteria specified in §63.7881(a) constitute the affected source:

(b)(1) Process vents. The affected source is the entire group of process vents associated with both in situ and ex situ remediation.

(2) Remediation material management units. The affected source is the entire group of tanks, surface

impoundments, containers, oil/water separators, organic/water separators and transfer systems involved in remediation. For the purpose of implementing the standards under this subpart, a unit that meets the definition of a tank or container that is also equipped with a vent that serves as a process vent for processes including, but not limited to, air stripping and solvent extraction, as defined in §63.7942, is not a remediation material management unit, but instead is a process vent and is to be included in the appropriate affected source group under paragraph (b)(1) of this section.

(3) Equipment leaks. The affected source is the entire group of equipment components (pumps, valves, etc.) involved in remediation, meeting both of the conditions specified in paragraphs (b)(3)(i) and (ii) of this section. If either of these conditions do not apply to an equipment component, then that component is not part of the affected source for equipment leaks.

(i) The equipment component contains or contacts remediation material having a total HAP concentration equal to or greater than 10 percent by weight; and

(ii) The equipment component is intended to operate for 300 hours or more during a calendar year in

remediation material service, as defined in §63.7942.

(c) Exceptions.

(1) Facility-wide exemption. You are exempt from the requirements of this subpart where the total annual quantity of HAP contained in all extracted remediation material at the facility (including HAP emitted from process vents) is less than 1 megagram per year. For your facility to be exempt under the provisions of this paragraph, you must meet the requirements in paragraphs (c)(1)(i) through (iii) of this section.

(i) You must prepare an initial determination of the total annual HAP quantity in the extracted remediation material at the facility. This determination is based on the total quantity of HAP in Table 1 of this subpart as determined at the point-of-extraction for each remediation material component. The quantity of HAP contained in vent streams from in situ remediation operations must be included in the determination of the total annual organic HAP quantity in Table 1 of this subpart. The HAP quantity in the vent streams must be determined prior to any control devices.

(ii) You must prepare a new determination whenever the extent of changes to the quantity or composition of

the remediation material extracted at the facility could cause the total annual HAP quantity in Table 1 of this subpart in the extracted remediation material to exceed 1 megagram per year.

(iii) You must maintain documentation to support your determination of the total annual HAP quantity in the extracted remediation material. This documentation must include the basis and data used for determining the HAP content of the extracted remediation material.

(2) Affected source exemption. Any affected source that is also subject to another subpart under 40 CFR part 61 or 40 CFR part 63, where you are controlling the HAP in Table 1 of this subpart that are emitted from the source in compliance with the provisions specified in the other applicable subpart under part 61 or 63, is exempt from the requirements of §§63.7883 through 63.7933.

(3) Process vents. You are exempt from the requirements of §§63.7890 through 63.7933 for process vents if any of the criteria listed in paragraphs (c)(3)(i) through (iv) of this section are met, except that the records of the determination of these criteria must be maintained as required in §63.7932(a)(4):

(i) Affected process vents where the emissions of

HAP in Table 1 of this subpart from all vents at the facility involved in remediation are below 1.4 kilograms per hour (3 pounds per hour) and 2.8 megagrams per year (3.1 tons per year) as determined by the procedures specified in §63.7912(f).

(ii) Individual process vents associated with ex situ remediation operations that manage remediation material with a Table 1 (of this subpart) HAP concentration less than 10 parts per million by weight (ppmw). The HAP concentration must be determined in accordance with the procedures specified in §63.7912(a). Documentation must be prepared by the owner or operator and maintained at the facility to support the determination of the remediation material concentration. This documentation must include identification of each process vent exempted under this paragraph and any test results used to determine the HAP concentration.

(iii) Individual process vents where you determine that the process vent stream flow rate is less than 6.0 cubic meters per minute (m^3/min) at standard conditions (as defined in 40 CFR 63.2) and the total HAP concentration is less than 20 parts per million by volume (ppmv). The process vent stream flow rate and total HAP

concentration must be determined in accordance with the procedures specified in §63.694(m). For the purposes of this subpart, when you read the term “HAP listed in Table 1 of this subpart” in 40 CFR Subpart DD, you should refer to Table 1 of this subpart. Documentation must be prepared by the owner or operator and maintained at the facility to support the determination of the process vent stream flow rate and total HAP concentration. This documentation must include identification of each process vent exempted under this paragraph and the test results used to determine the process vent stream flow rate and total HAP concentration. You must perform a new determination of the process vent stream flow rate and total HAP concentration when the extent of changes to operation of the unit on which the process vent is used could cause either the process vent stream flow rate to exceed the limit of 6.0 m^3/min or the total HAP concentration to exceed the limit of 20 ppmv.

(iv) Individual process vents where you determine that the process vent stream flow rate is less than 0.005 m^3/min at standard conditions (as defined in 40 CFR 63.2). The process vent stream flow rate must be determined in accordance with the procedures specified in §63.694(m).

Documentation must be prepared by the owner or operator and maintained at the facility to support the determination of the process vent stream flow rate. This documentation must include identification of each process vent exempted under this paragraph and the test results used to determine the process vent stream flow rate.

(4) Remediation material management units. You are exempt from the requirements of §§63.7890 through 63.7932 for units where any of the criteria listed in paragraphs (c)(4)(i) or (ii) of this section are met, except that the records of the determination of these criteria must be maintained as required in §63.7932(a)(4):

(i) The volatile organic HAP (VOHAP) concentration of the remediation material managed in the unit is less than 500 ppmw. You must follow the requirements in §63.7912(a) to demonstrate that the VOHAP concentration of the remediation material is less than 500 ppmw. Once the VOHAP concentration has been determined to be less than 500 ppmw, all management units downstream from the point of determination are exempt from the control requirements of this subpart unless a remediation process is used that concentrates all, or part of, the remediation material being managed in the unit such that

the VOHAP concentration equals or exceeds 500 ppmw (e.g., free-product separation).

(ii) At your discretion, one or a combination of remediation material management units may be exempted from the requirements in this subpart when the quantity of total annual HAP in Table 1 of this subpart placed in the units exempted under this paragraph is less than 1 megagram per year. For the units to be exempted from the requirements of this subpart, you must meet the requirements in §63.683(b)(2)(ii)(A) and (B). You may change the units selected to be exempted under this paragraph by preparing a new designation for the exempt units as required by §63.683(b)(2)(ii)(A) and performing a new determination as required by §63.683(b)(2)(ii)(B).

(5) Tanks and surface impoundments. You are exempt from the requirements of §§63.7890 (excluding §63.7890(a)) through 63.7932 for any tank or surface impoundment used for biological treatment processes where the requirements of §63.683(b)(2)(iii)(A) or (B) and monitored in accordance with §63.684(e)(4) are met, except that the records of the determination of these criteria must be maintained as required in §63.7932(a)(4).

(6) Cleanup of any contamination where removal or treatment of the material begins within seven days from the time that the contamination occurs. The cleanup process should be continuous (i.e., performed every workday) and typically completed in 30 days or less.

(7) Radioactive mixed waste managed in accordance with all applicable regulations under the Atomic Energy Act and the Nuclear Waste Policy Act authorities.

(d) An affected source is a new affected source if you commenced construction of the affected source after [INSERT DATE OF PUBLICATION OF THIS PROPOSED RULE IN THE FEDERAL REGISTER] and you meet the applicability criteria in §63.7881 at the time you commenced construction.

(e) An affected source is reconstructed if you meet the criteria as defined in §63.2 of subpart A of this part.

(f) An affected source is existing if it is not new or reconstructed.

§63.7883 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to the guidance in paragraphs (a)(1) and (2) of this section.

(1) If you startup your affected source before the effective date of the subpart, then you must comply with the emissions limitations and work practice standards in this subpart no later than the effective date of the subpart. If you startup your affected source before the effective date of the subpart, but the affected source will not operate on or after the effective date of the subpart, then that affected source is not subject to any of the requirements contained in this subpart.

(2) If you startup your affected source after the effective date of the subpart, then you must comply with the emissions limitation and work practice standards in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the emissions limitations and work practice standards for existing sources no later than 3 years after [DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]. If you have an existing affected source that will not be in operation on or after 3 years after [DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER], then the affected source is not subject to any of the requirements contained in this subpart.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply:

(1) Any portion of the existing facility that is a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the source must be in compliance with this subpart by no later than 3 years after it becomes a major source.

(d) You must meet the notification requirements in §63.7931(a) according to the schedule in §63.7931(b) and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emissions limitations and work practice standards in this subpart.

Emissions Limitations and Work Practice Standards

§63.7890 What emissions limitations and work practice standards must I meet?

(a) You must meet each emissions limitation for process vent affected sources in Table 2 of this subpart that applies to you.

(b) You must meet each emissions limitation for

remediation material management unit affected sources in Table 3 of this subpart that applies to you.

(c) You must meet each operating limit in Table 4 of this subpart that applies to you. In lieu of the operating limits in Table 4 of this subpart, you may choose to establish an operating limit based on total organic or HAP emissions concentration using a continuous emissions monitoring system (CEMS). In this case, the average outlet total organic or HAP concentration in any 24-hour period must not exceed the average concentration established during the performance test (see §63.7913(f)).

(d) You must meet each work practice standard in Table 5 of this subpart that applies to you.

(e) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section. If you apply for permission to use an alternative to the work practice standards in this section, you must submit the information described in §63.6(g)(2).

General Compliance Requirements

§63.7900 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emissions limitations (including operating limits) and the work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(c) You must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).

(d) For each monitoring system required in this section, you must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:

(i) Installation of the continuous monitoring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(ii) Performance and equipment specifications for

the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and

(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(e) In your site-specific monitoring plan, you must also address the following:

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), (4)(ii), (7), and (8);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(f) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(g) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

§63.7901 What requirements must I meet if I transfer remediation material to another party, another facility

or receive remediation material from another facility?

(a) You may elect to transfer remediation material to an on-site remediation operation not owned or operated by the owner or operator of the remediation material, or to an off-site treatment operation. If you manage remediation material meeting the criteria in §63.7882 you must comply with the requirements in paragraphs (a)(1) through (4) of this section.

(1) The owner or operator transferring the remediation material must:

(i) Comply with the provisions specified in §§63.7890 through 63.7933 of this subpart for each affected source that manages remediation material prior to shipment or transport.

(ii) Include a notice with the shipment or transport of each remediation material item. The notice must state that the remediation material contains organic HAP that are to be treated in accordance with the provisions of this subpart. When the transport is continuous or ongoing (for example, discharge to a publicly owned treatment works), the notice must be submitted to the treatment operator initially and whenever there is a change in the required treatment.

(2) You may not transfer the remediation material unless the transferee has submitted to the EPA a written certification that the transferee will manage and treat the remediation material received from a source subject to the requirements of this subpart in accordance with the requirements of §§63.7890 through 63.7933. The certifying entity may revoke the written certification by sending a written statement to the EPA and the owner or operator providing at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph. Upon expiration of the notice period, you may not transfer the remediation material to the treatment operation.

(3) By providing this written certification to the EPA, the certifying entity accepts responsibility for compliance with the regulatory provisions listed in paragraph (a)(2) of this section with respect to any shipment of remediation material covered by the written certification. Failure to abide by any of those provisions with respect to such shipments may result in enforcement action by the EPA against the certifying entity in accordance with the enforcement provisions

applicable to violations of these provisions by owners or operators of sources.

(4) Written certifications and revocation statements to the EPA from the transferees of remediation material must be signed by the responsible official of the certifying entity, provide the name and address of the certifying entity, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the treater.

Testing and Initial Compliance Requirements

§63.7910 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) For existing sources, you must conduct performance tests within 180 calendar days after the compliance date that is specified for your source in §63.7883(b).

(b) For new sources, you must conduct initial performance tests and other initial compliance demonstrations according to the provisions in §63.7(a)(2)(i) and (ii).

§63.7911 When must I conduct subsequent performance tests?

(a) For non-flare control devices, you must conduct the performance testing required in Table 6 of this subpart at any time the EPA requires you to in accordance with section 114 of the CAA.

§63.7912 What tests, design evaluations, and other procedures must I use?

(a) Determination of average VOHAP concentration of material prior to, or at, the point of management or treatment. This section specifies the testing methods and procedures required for determining the average VOHAP concentration for remediation material.

(1) These methods may be used to determine the average VOHAP concentration of any material listed in (a)(1)(i) through (iii) of this section.

(i) A single remediation material stream; or

(ii) Two or more remediation material streams that are combined prior to, or within, a management or treatment unit or operation; or

(iii) Remediation material that is combined with one or more non-remediation material streams prior to, or within, a management or treatment operation or unit.

(2) The average VOHAP concentration of a material must be determined using either direct measurement as

specified in paragraph (a)(3) of this section or by knowledge as specified in paragraph (a)(4) of this section.

(3) Direct measurement to determine VOHAP concentration.

(i) Sampling. Samples of each material stream must be collected from the container, pipeline, or other device used to deliver each material stream prior to entering the treatment or management unit in a manner such that volatilization of organics contained in the sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

(A) The averaging period to be used for determining the average VOHAP concentration for the material stream on a mass-weighted average basis must be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the material stream but must not exceed 1 year. For streams that are combined, an averaging period representative for all streams must be selected.

(B) No less than four samples must be collected to represent the complete range of HAP compositions and HAP

quantities that occur in each material stream during the entire averaging period due to normal variations in the material stream(s). Examples of such normal variations are variation of material HAP concentration within a contamination area or seasonal variations in non-remediation material quantity.

(C) All samples must be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the material stream(s) are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on site in the facility operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 or Method 25D in 40 CFR part 60, appendix A.

(ii) Analysis. Each collected sample must be prepared and analyzed in accordance with either one of

the methods listed in §63.694(b)(2)(ii), or any current EPA Contracts Lab Program method (or future revisions) capable of identifying all the HAP in Table 1 of this subpart.

(iii) Calculations. The average VOHAP concentration ($\bar{C}$) on a mass-weighted basis must be calculated by using the results for all samples analyzed in accordance with paragraph (a)(3)(ii) of this section and Equation 1 of this section as follows:

$$\bar{C} = \frac{1}{Q_T} x \sum_{i=1}^{n} (Q_i x C_i) \qquad \text{(Eq. 1)}$$

where:

$\bar{C}$ = Average VOHAP concentration of the material on a mass-weighted basis, ppmw.
i = Individual sample "i" of the material.
n = Total number of samples of the material collected (at least 4 per stream) for the averaging period (not to exceed 1 year).
Q_i = Mass quantity of material stream represented by C_i, kilograms per hour (kg/hr).
Q_T = Total mass quantity of all material during the averaging period, kg/hr.
C_i = Measured VOHAP concentration of sample "i" as determined in accordance with the requirements of (a)(3)(ii) of this section, ppmw.

(4) Knowledge of the material to determine VOHAP concentration.

(i) Documentation must be prepared that presents the information used as the basis for the owner's or operator's knowledge of the material stream's average VOHAP concentration. Examples of information that may be used as the basis for knowledge include: material balances for the source(s) generating each material stream; species-specific chemical test data for the material stream from previous testing that are still applicable to the current material stream; test data for material from the contamination area(s) being remediated; or other knowledge based on information included in manifests, shipping papers, or waste certification notices.

(ii) If test data are used as the basis for knowledge, then the owner or operator must document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VOHAP concentration. For example, an owner or operator may use HAP concentration test data for the material stream that are validated in accordance with Method 301 in 40 CFR part 63, appendix A of this part as the basis for knowledge of the material. This information must be

provided for each material stream where streams are combined.

(iii) An owner or operator using species-specific chemical concentration test data as the basis for knowledge of the material may adjust the test data to the corresponding average VOHAP concentration value which would be obtained had the material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the material is multiplied by the appropriate species-specific adjustment factor (f_{m305}) listed in Table 1 of this subpart.

(iv) In the event that the Administrator and the owner or operator disagree on a determination of the average VOHAP concentration for a material stream using knowledge, then the results from a determination of VOHAP concentration using direct measurement as specified in paragraph (a)(3) of this section must be used to establish compliance with the applicable requirements of this subpart. The Administrator may perform or request that the owner or operator perform this determination using direct measurement.

(b) You must conduct either each performance test in

Table 6 of this subpart that applies to you or each design analysis specified in §63.693(d)(2)(ii), (e)(2)(ii), (f)(2)(ii), or (g)(2)(i)(B) that applies to you.

(c) You must conduct each performance test according to the requirements in §63.7(e)(1) and under the specific conditions that this subpart specifies in Table 6 of this subpart.

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour. During the performance test conducted according to this section, you must collect the appropriate operating parameter monitoring system data (see Table 4 of this subpart), average the operating parameter data over each test run, and set operating limits, whether a minimum or maximum value, based on the average of values for each of the three test runs. If you use a control device design analysis to demonstrate control device performance, then the minimum or maximum operating parameter value must be established based on the control device design analysis and supplemented, as necessary, by the control device manufacturer

recommendations or other applicable information.

(e) Compliance with control device percent reduction requirement. You must use Equations 2, 3 and 4 of this section to determine initial and ongoing compliance with the control device percent reduction limit in Table 2 of this subpart for the combination of all affected process vents at the facility. You must use Equations 2, 3 and 5 of this section to determine initial and ongoing compliance with the control device percent reduction limit in Table 3 of this subpart for remediation material management units, except that the references to uncontrolled vents for Equations 2 and 3 of this section do not apply.

(1) To calculate control device inlet and outlet concentrations use Equations 2 and 3 as follows:

$$E_i = K_2\left(\sum_{j=1}^{n} C_{ij}M_{ij}\right)Q_i \qquad \text{(Eq. 2)}$$

$$E_o = K_2\left(\sum_{j=1}^{n} C_{oj}M_{oj}\right)Q_o \qquad \text{(Eq. 3)}$$

Where:

C_{ij}, C_{oj} = Concentration of sample component j of the gas stream at the inlet and outlet of the control device, dry basis, parts per million by volume. For uncontrolled vents, $C_{ij} = C_{oj}$ and equal the concentration exiting the vent;

E_i, E_o = Mass rate of total organic compounds (TOC) (minus methane and ethane) or total HAP, from Table 1 of this subpart, at the inlet and outlet of the control device, respectively, dry basis, kilogram per hour. For uncontrolled vents, $E_i = E_o$ and equal the concentration exiting the vent;

M_{ij}, M_{oj} = Molecular weight of sample component j of the gas stream at the inlet and outlet of the control device, respectively, gram/gram-mole. For uncontrolled vents, $M_{ij} = M_{oj}$ and equal the gas stream molecular weight exiting the vent;

Q_i,Q_o = Flowrate of gas stream at the inlet and outlet of the control device, respectively, dry standard cubic meters per minute (dscm/min). For uncontrolled vents, $Q_i = Q_o$ and equals the flowrate exiting the vent;

K_2 = Constant, 2.494 X 10^{-6} (parts per million)$^{-1}$(gram-mole per standard cubic meter)(kilogram/gram)(minute/hour, where standard temperature (gram-mole per standard cubic meter) is 20EC;

n = the number of components in the sample.

(2) To calculate control device emissions reductions for process vents use Equation 4 of this section as follows:

$$R_v = \frac{\sum_{j=1}^{n} E_i - \sum_{j=1}^{n} E_o}{\sum_{j=1}^{n} E_i} \times 100 \qquad \text{(Eq. 4)}$$

Where:

R_v = Overall emissions reduction for all affected process vents, percent

E_i = Mass rate of TOC (minus methane and ethane) or total HAP, from Table 1 of this subpart, at the inlet to the control device, or exiting the vent for uncontrolled vents, as calculated in this section, kilograms TOC per hour or kilograms HAP per hour;

E_o = Mass rate of TOC (minus methane and ethane) or total HAP, from Table 1 of this subpart, at the outlet to the control device, or exiting the vent for uncontrolled vents, as calculated in this section, kilograms TOC per hour or kilograms HAP per hour. For vents without a control device, $E_o = E_i$;

n = number of affected source process vents.

(3) To calculate control device emissions reductions for remediation material management units use Equation 5 of this section as follows:

$$R_{cd} = \frac{E_i - E_o}{E_i} X 100 \qquad \text{(Eq. 5)}$$

Where:

R_{cd} = Control efficiency of control device, percent.
E_i = Mass rate of TOC (minus methane and ethane) or total HAP at the inlet to the control device as calculated under paragraph (e)(1) of this section, kilograms TOC per hour or kilograms HAP per hour.
E_o = Mass rate of TOC (minus methane and ethane) or total HAP at the outlet of the control device, as calculated under paragraph (e)(1) of this section, kilograms TOC per hour or kilograms HAP per hour.

(4) If the vent stream entering a boiler or process heater is introduced with the combustion air or as a secondary fuel, the weight-percent reduction of total HAP or TOC (minus methane and ethane) across the device must be determined by comparing the TOC (minus methane and ethane) or total HAP in all combusted vent streams and primary and secondary fuels with the TOC (minus methane and ethane) or total HAP exiting the device, respectively.

(f) Compliance with the total organic mass emissions rate.

(1) The requirements of paragraphs (f)(2) through (4) of this section must be used to determine compliance

with the emissions rate limits in Table 2 of this subpart.

(2) Initial and ongoing compliance with the total organic mass flow rates specified in Table 2 of this subpart must be determined using Equation 6 of this section as follows:

$$E_h = Q_{sd}\left\{\sum_{i=1}^{n} C_i MW_i\right\}\left[0.0416\right]\left[10^{-6}\right] \quad \text{(Eq. 6)}$$

where:

E_h = Total organic mass flow rate, kg/h;
Q_{sd} = Volumetric flow rate of gases entering or exiting control device (or exiting the process vent if no control device is used), as determined by Method 2, dscm/h;
n = Number of organic compounds in the vent gas;
C_i = Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18;
MW_i = Molecular weight of organic compound i in the vent gas,kg/kg-mol;
0.0416 = Conversion from molar volume, kg-mol/m^3 (@ 293 K and 760 mm Hg);
10^{-6} = Conversion from ppm, ppm^{-1}.

(3) Ongoing compliance with the annual total organic emissions rate specified in Table 2 of this subpart must be determined using Equation 7 of this section as follows:

$$E_A=(E_h)(H) \quad \text{(Eq. 7)}$$

where:

E_A = Total organic mass emissions rate, kilograms per year;
E_h = Total organic mass flow rate for the process vent, kg/h;
H = Total annual hours of operation for the affected unit, h.

(4) Ongoing compliance with the total organic emissions limit from all affected process vents at the facility in Table 2 of this subpart must be determined by: a) summing the total hourly organic mass emissions rates (E_h as determined in Equation 6 of this section); and b) summing the total annual organic mass emissions rates (E_A, as determined in Equation 7 of this section) for all affected process vents at the facility.

(g) Compliance with HAP concentration limit.

(1) To determine compliance with the enclosed combustion device total HAP concentration limits specified in Table 2 of this subpart, you must use either Method 18, 40 CFR part 60, appendix A, or Method 25A, 40 CFR part 60, appendix A, to measure either TOC (minus methane and ethane) or total HAP. Alternatively, any other method or data that have been validated according to Method 301 of appendix A of this part, may be used.

The following procedures must be used to calculate ppmv concentration, corrected to 3 percent oxygen:

(2) The minimum sampling time for each run must be 1 hour, in which either an integrated sample or a minimum of four grab samples must be taken. If grab sampling is used, then the samples must be taken at approximately equal intervals in time, such as 15-minute intervals during the run.

(3) The TOC concentration or total HAP concentration must be calculated according to paragraph (g)(3)(i) or (ii) of this section.

(i) The TOC concentration is the sum of the concentrations of the individual components and must be computed for each run using Equation 8 of this section as follows:

$$C_{TOC} = \sum_{i=1}^{x} \frac{\sum_{i=1}^{n} C_{ji}}{x} \qquad \text{(Eq. 8)}$$

Where:

C_{TOC} = Concentration of total organic compounds minus methane and ethane, dry basis, parts per million

by volume.
C_{ji} = Concentration of sample component j of sample i, dry basis, parts per million by volume.
n = Number of components in the sample.
X = Number of samples in the sample run.

(ii) The total HAP concentration must be computed according to Equation 8 in paragraph (g)(3)(i) of this section, except that only HAP listed in Table 1 of this subpart must be summed.

(4) The TOC concentration or total HAP concentration must be corrected to 3 percent oxygen according to paragraphs (4)(i) and (ii) of this section.

(i) The emissions rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B, 40 CFR part 60, appendix A, must be used to determine the oxygen concentration. The samples must be taken during the same time that the samples are taken for determining TOC concentration or total HAP concentration.

(ii) The TOC and HAP concentration must be corrected for percent oxygen by using Equation 9 of this section as follows:

$$C_c = C_m\left(\frac{17.9}{20.9 - \%O_{2d}}\right) \qquad \text{(Eq. 9)}$$

Where:

C_c = TOC concentration or total HAP concentration corrected to 3 percent oxygen, dry basis, parts per million by volume.
C_m = TOC concentration or total HAP concentration, dry basis, parts per million by volume.
$\%O_{2d}$ = Concentration of oxygen, dry basis, percent by volume.

(h) You must conduct each design evaluation of a control device according to the specific requirements for the control device in §63.693(c) through (h). For the purposes of this subpart, when you read the term “HAP listed in Table 1 of this subpart” in 40 CFR Subpart DD, you should refer to Table 1 of this subpart.

(i) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(j) When conducting testing to comply with a HAP or TOC reduction efficiency limit, you must conduct simultaneous sampling at the inlet and outlet of the control device. You must conduct inlet sampling after the final product recovery device. If a vent stream is introduced with the combustion air or as an auxiliary fuel into a boiler or process heater, the location of the inlet sampling sites must be selected to ensure that the measurement of total HAP concentration or TOC concentration includes all vent streams and primary and

secondary fuels introduced into the boiler or process heater.

(k) When complying with the emissions rate limit in row (1)(b) of Table 2 of this subpart or a HAP or TOC emissions concentration limit in Table 3 of this subpart, you must conduct sampling at the outlet of the control device.

(l) If you use Method 18, 40 CFR part 60, appendix A, either an integrated sample or a minimum of four grab samples must be taken. If you use grab sampling, then you must take the grab samples at approximately equal intervals in time (such as 15 minutes) during the run. Also, you must first determine which HAP are present in the inlet gas stream using knowledge of the remediation material or the screening procedure described in Method 18, 40 CFR part 60, appendix A, quantify the emissions for all HAP identified as present in the inlet gas stream for both the inlet and outlet gas streams of the control device.

(m) If you use Method 25A, 40 CFR part 60, appendix A, you must calibrate the instrument in accordance with the monitoring plan of §63.7900 using the single organic HAP representing the largest percent by volume of the

emissions. The Method 25A, 40 CFR part 60, appendix A, results are acceptable if: (1) the response from the high level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on its most sensitive scale, and (2) the span value of the analyzer must be less than 100 ppmv.

(n) You must conduct each CMS performance evaluation according to the requirements in §63.8(e).

§63.7913 What are my monitoring installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain each CMS according to the requirements in §63.695(a) through (d), (e)(1) and (e)(2). In addition, you must collect and analyze temperature, flow, pressure, or pH data according to the requirements in paragraphs (a)(1) through (4) of this section:

(1) To calculate a valid hourly value, you must have at least three of four equally spaced data values (or at least two, if that condition is included to allow for periodic calibration checks) for that hour from a CMS that is not out of control according to the monitoring plan referenced in §63.7900.

(2) To calculate the average emissions for each averaging period, you must have at least 75 percent of the hourly averages for that period using only block hourly average values that are based on valid data (i.e., not from out-of-control periods).

(3) Determine the hourly average of all recorded readings.

(4) Record the results of each inspection, calibration, and validation check.

(b) For each temperature monitoring device, you must meet the requirements in paragraph (a) of this section and also meet the requirements in paragraphs (b)(1) through (8) of this section:

(1) Locate the temperature sensor in a position that provides a representative temperature.

(2) For a noncryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.2^{o} C or 0.75 percent of the temperature value, whichever is larger.

(3) For a cryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.2^{o} C or 2 percent of the temperature value, whichever is larger.

(4) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(5) If a chart recorder is used, it must have a sensitivity in the minor division of at least 20° F.

(6) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7° C of the process temperature sensor's reading.

(7) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(8) At least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

(c) For each flow measurement device, you must meet the requirements in paragraphs (a)(1) through (4) and paragraphs (c)(1) through (5) of this section:

(1) Locate the flow sensor and other necessary

equipment such as straightening vanes in a position that provides a representative flow.

(2) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the flow rate.

(3) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) Conduct a flow sensor calibration check at least semi-annually.

(5) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(d) For each pressure measurement device, you must meet the requirements in paragraph (a)(1) through (4) and paragraphs (d)(1) through (7) of this section.

(1) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the

pressure range.

(4) Check pressure tap pluggage daily.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Conduct calibration checks any time the sensor exceeds the manufacturer’s specified maximum operating pressure range or install a new pressure sensor.

(7) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(e) For each pH measurement device, you must meet the requirements in paragraph (a)(1) through (4) and paragraphs (e)(1) through (4) of this section:

(1) Locate the pH sensor in a position that provides a representative measurement of pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter’s calibration on at least two points every 8 hours of process operation.

(4) At least monthly, inspect all components for integrity and all electrical connections for continuity.

(f) Alternative to parametric monitoring for any control device. As an alternative to the parametric

monitoring required in paragraphs (a) through (e) of this section, you may install, calibrate, and operate a CEMS to measure the control device outlet total organic emissions or organic HAP emissions concentration. The CEMS used on combustion control devices must include a diluent gas monitoring system (for O_2 or CO_2) with the pollutant monitoring system in order to correct for dilution (e.g., to 0 percent excess air). You must verify the performance of the CEMS initially according to the procedures in Performance Specification 8 (for a total organic emissions CEMS) or Performance Specification 9 (for a HAP emissions CEMS) and Performance Specification 3 (for an O_2 or CO_2 CEMS) of appendix B of 40 CFR part 60. The relative accuracy provision of Performance specification 8, sections 2.4 and 3 need not be conducted. You must prepare a site-specific monitoring plan for operating, calibrating, and verifying the operation of your CEMS in accordance with the requirements in §§63.8(c), (d), and (e). You must establish the emissions concentration operating limit according to paragraphs (f)(1),(2), and (3) of this section.

(1) During the performance test required by §63.7912,

you must monitor and record the total organic or HAP emissions concentration at least once every 15 minutes during each of the three test runs.

(2) Use the data collected during the performance test to calculate and record the average total organic or HAP emissions concentration maintained during the performance test. The average total organic or HAP emissions concentration, corrected for dilution as appropriate, is the maximum operating limit for your control device.

(3) Use the CEMS data to verify that the daily (24-hour) average total organic or HAP emissions concentration remain below the established operating limit.

§63.7914 How do I demonstrate initial compliance with the emissions limitations and work practice standards?

(a) You must demonstrate initial compliance with each emissions limitation and work practice standard that applies to you according to Tables 7 and 8 of this subpart.

(b) You must establish each site-specific operating limit in Table 4 of this subpart that applies to you according to the requirements in §63.7912 and Table 6 of

this subpart.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7931(e).

Continuous Compliance Requirements

§63.7920 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section and the monitoring plan of §63.7900.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, out of control periods and required quality assurance or control activities in data averages and calculations used to report emissions or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during

all other periods in assessing the operation of the control device and associated control system.

§63.7921 How do I demonstrate continuous compliance with the emissions limitations, operating limits and work practice standards?

(a) You must demonstrate continuous compliance with each emissions limitation, operating limit and work practice standard in Tables 2 through 5 of this subpart that applies to you according to methods specified in Tables 9, 10, and 11 of this subpart.

(b) You must report each instance in which you did not meet each emissions limitation and each operating limit in Tables 9 and 10 of this subpart that apply to you. This includes periods of startup, shutdown, and malfunction. You must also report each instance in which you did not meet the requirements in Table 11 of this subpart that apply to you. These instances are deviations from the emissions limitations and work practice standards in this subpart. These deviations must be reported according to the requirements in §63.7931.

(c) During periods of startup, shutdown, and malfunction, you must operate in accordance with the startup, shutdown, and malfunction plan.

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan. We will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

Notification, Reports, and Records

§63.7930 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), 63.8(f)(4) and (6), and 63.9(b) through (h) that apply to you.

(b) As specified in §63.9(b)(2), if you start up your affected source before [DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER], you must submit an Initial Notification not later than 120 calendar days after [DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER].

(c) As specified in §63.9(b)(3), if you start up your new or reconstructed affected source on or after the effective date, you must submit an Initial Notification no later than 120 calendar days after initial startup.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in Tables 6, 7, or 8 of this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Tables 7 or 8 of this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Tables 6, 7 or 8 of this subpart that includes a performance test conducted according to the requirements in Table 6 of this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the

performance test according to §63.10(d)(2).

§63.7931 What reports must I submit and when?

(a) You must submit each report in Table 12 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 12 of this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section:

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7883 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.7883.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.7883.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through

December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information in paragraphs (c)(1) through (7) of this section:

(1) Company name and address.

(2) Statement by a responsible official, including that official’s name, title, and signature, certifying the truth, accuracy and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) Any changes to the information listed in paragraph (d) of this section that have occurred since the last report.

(5) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(6) If there are no deviations from any emissions limitations (emissions limit or operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 11 of this subpart, a statement that there were no deviations from the emissions limitations or work practice standards during the reporting period.

(7) If there were no periods during which the CMS and operating parameter monitoring systems were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during the which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emissions limitation (emissions limit, operating limit) and for each deviation from the requirements for work practice standards in Table 11 of this subpart that occurs at an affected source where you are not using a CMS to comply with the emissions limitations or work practice standards in this subpart, the compliance report must contain the information in (c)(1) through (4) of this section, and paragraphs (d)(1) and (2) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the action taken to correct the cause of the deviation.

(e) For each deviation from an emissions limitation (emissions limit, operating limit) occurring at an affected source where you are using a CMS in accordance with the monitoring plan of §63.7900 to comply with the emissions limitation in this subpart, you must include the information in (c)(1) through (4), and paragraphs (e)(1) through (12) of this section. This includes

periods of startup, shutdown, and malfunction.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time

during that reporting period.

(8) An identification of each hazardous air pollutant that was monitored at the affected source.

(9) A brief description of the process units.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 12 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emissions limitation(including any operating limit), or work practice requirement in this subpart, submission of the compliance report must be deemed to satisfy any

obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report must not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

§63.7932 What records must I keep?

(a) You must keep records as described in paragraphs (a)(1) through (4) of this section:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(1) and (b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startups, shutdowns, and malfunctions.

(3) Results of performance tests.

(4) The records of initial and ongoing determinations for affected sources that are exempt from control requirements under this subpart.

(b) For each CMS, you must keep the records as described in paragraphs (b)(1) and (2) of this section:

(1) Records described in §63.10(b)(2)(vi) through (xi) that apply to your CMS.

(2) Performance evaluation plans, including previous (i.e., superseded) versions of the plan as required in §63.8(d)(3).

(c) You must keep the records required in Tables 9,10, and 11 of this subpart to show continuous compliance with each emissions limitation and work practice standard that applies to you.

§63.7933 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep your files of all information (including all reports and notifications) for 5 years following the date of each occurrence, measurement, maintenance, action taken to correct the cause of a deviation, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records

offsite for the remaining 3 years.

(d) If, after the remediation activity is completed, there is no other remediation activity at the facility, and you are no longer the owner of the facility, you may keep all records for the completed remediation activity at an offsite location provided you notify the Administrator in writing of the name, address and contact person for the offsite location.

Other Requirements and Information

§63.7940 What parts of the General Provisions apply to me?

(a) Table 13 of this subpart shows which parts of the General Provisions in §63.1-§63.15 apply to you.

§63.7941 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to the EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office (see list in §63.13) to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are as follows.

(1) Approval of alternatives to the non-opacity emissions limitations and work practice standards in §63.7890(a) through (d) under §63.6(g).

(2) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§63.7942 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, the General Provisions of this part, and in this section. If the same term is defined in another subpart and in this section, it will have the meaning given in this section for purposes of this subpart.

Air stripping means a desorption operation employed to transfer one or more volatile components from a liquid mixture into a gas (air) either with or without the application of heat to the liquid. Packed towers, spray towers and bubble-cap, sieve, or valve-type plate towers are among the process configuration used for contacting the air and a liquid.

Boiler means an enclosed combustion device that extracts useful energy in the form of steam and is not an incinerator or a process heater.

Closed-vent system means a system that is not open to the atmosphere and is composed of hard-piping, ductwork, connections, and, if necessary, fans, blowers, or other flow-inducing device that conveys gas or vapor from an emissions point to a control device.

Closure device means a cap, hatch, lid, plug, seal, valve, or other type of fitting that prevents or reduces air pollutant emissions to the atmosphere by blocking an opening in a cover when the device is secured in the closed position. Closure devices include devices that are detachable from the cover (e.g., a sampling port cap), manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded

pressure relief valve).

Container means a portable unit used to hold material. Examples of containers include, but are not limited to drums, dumpsters, roll-off boxes, bulk cargo containers commonly known as portable tanks or totes, cargo tank trucks, dump trucks and tank rail cars.

Continuous record means documentation of data values measured at least once every 15 minutes and recorded at the frequency specified in this subpart.

Continuous recorder means a data recording device that either records an instantaneous data value at least once every 15 minutes or records 15-minutes or more frequent block averages.

Continuous seal means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

Control device means equipment used for recovering or oxidizing organic vapors. Examples of such equipment include but are not limited to carbon adsorbers,

condensers, vapor incinerators, flares, boilers, and process heaters.

Cover means a device that prevents or reduces air pollutant emissions to the atmosphere by forming a continuous barrier over the remediation material managed in a unit. A cover may have openings (such as access hatches, sampling ports, gauge wells) that are necessary for operation, inspection, maintenance, and repair of the unit on which the cover is used. A cover may be a separate piece of equipment which can be detached and removed from the unit (such as a tarp) or a cover may be formed by structural features permanently integrated into the design of the unit.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) fails to meet any requirement or obligation established by this subpart, including but not limited to any emissions limitation(including any operating limit), or work practice standard;

(2) fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for

any affected source required to obtain such a permit; or

(3) fails to meet any emissions limitation,(including any operating limit), or work practice standard in this subpart during startup, shutdown, or malfunction, regardless or whether or not such failure is permitted by this subpart.

Emissions limitation means any emissions limit, opacity limit, operating limit, or visible emissions limit.

Emissions point means an individual tank, surface impoundment, container, oil/water, organic/water separator, transfer system, vent, or enclosure.

Enclosure means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapor through a closed vent system to a control device.

Equipment means each pump, pressure relief device, sampling connection system, valve, and connector used in remediation material service at a facility.

External floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a tank with no fixed roof.

Facility means all contiguous or adjoining property

that is under common control including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof. A unit or group of units within a contiguous property that are not under common control (e.g., a wastewater treatment unit located at the facility but is owned by a different company) is a different facility.

Fixed roof means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the liquid managed in the unit.

Flame zone means the portion of the combustion chamber in a boiler or process heater occupied by the flame envelope.

Floating roof means a cover consisting of a double deck, pontoon single deck, or internal floating cover which rests upon and is supported by the liquid being contained, and is equipped with a continuous seal.

HAP means hazardous air pollutants.

Hard-piping means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

Individual drain system means a stationary system used to convey wastewater streams or residuals to a remediation material management unit or to discharge or disposal. The term includes hard-piping, all drains and junction boxes, together with their associated sewer lines and other junction boxes (e.g., manholes, sumps, and lift stations) conveying wastewater streams or residuals. For the purpose of this subpart, an individual drain system is not a drain and collection system that is designed and operated for the sole purpose of collecting rainfall runoff (e.g., stormwater sewer system) and is segregated from all other individual drain systems.

Internal floating roof means a cover that rests or floats on the liquid surface (but not necessarily in complete contact with it inside a tank that has a fixed roof).

Light-material service means the container is used to manage remediation material for which both of the following conditions apply: the vapor pressure of one or more of the organic constituents in the remediation material is greater than 0.3 kilopascals (kPa) at 20E C and the total concentration of the pure organic

constituents having a vapor pressure greater than 0.3 kPa at 20E C is equal to or greater than 20 percent by weight.

Liquid-mounted seal means a foam- or liquid-filled continuous seal mounted in contact with the liquid in a unit.

MACT activity means a non-remediation activity that is covered by a category of major sources listed pursuant to section 112(c) of the CAA. An activity is a MACT activity whether or not it is subject to the control requirements of its appropriate MACT standard(s).

Maximum HAP vapor pressure means the sum of the individual HAP equilibrium partial pressure exerted by remediation material at the temperature equal to either: the monthly average temperature as reported by the National Weather Service when the remediation material is stored or treated at ambient temperature; or the highest calendar-month average temperature of the remediation material when the remediation material is stored at temperatures above the ambient temperature or when the remediation material is stored or treated at temperatures below the ambient temperature. For the purpose of this subpart, maximum HAP vapor pressure is determined using

the procedures specified in §63.694(j). For the purpose of this subpart, when you read the term “Table 3 or Table 4 of this subpart” in §63.694(j) you should refer to Table 3 of this subpart.

Media means materials found in the natural environment such as soil, ground water, surface water, and sediments, or a mixture of such materials with liquids, sludges, or solids which is inseparable by simple mechanical removal processes and is made up primarily of media. This definition does not include debris (as defined in 40 CFR 268.2).

Metallic shoe seal means a continuous seal that is constructed of metal sheets which are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and is connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

No detectable organic emissions means no escape of organics to the atmosphere as determined using the procedure specified in 63.694(k).

Oil/water separator means a separator as defined for this subpart that is used to separate oil from water.

Operating parameter value means a minimum or maximum value established for a control device or treatment process parameter which, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emissions limitation or standard.

Organic/water separator means a separator as defined for this subpart that is used to separate organics from water.

Point-of-extraction means the point where you first extract the remediation material prior to placing the remediation material in a management unit or other unit, but before the first point where the organic constituents in the remediation material have the potential to volatilize and be released to the atmosphere. For the purpose of applying this definition to this subpart, the first point where the organic constituents in the remediation material have the potential to volatilize and be released to the atmosphere is not a fugitive emissions point due to an equipment leak from any of the following equipment components: pumps, compressors, valves, connectors, instrumentation systems, or safety devices.

Process heater means an enclosed combustion device

that transfers heat released by burning fuel directly to process streams or to heat transfer liquids other than water.

Process vent means any open-ended pipe, stack, duct, or other opening intended to allow the passage of gases, vapors, or fumes to the atmosphere and this passage is caused by mechanical means (such as compressors, vacuum-producing systems or fans) or by process-related means (such as volatilization produced by heating). For the purposes of this subpart, a process vent is neither a safety device (as defined in this section) nor a stack, duct or other opening used to exhaust combustion products from a boiler, furnace, heater, incinerator, or other combustion device.

Remediation material means material, including contaminated media, which is managed as a result of implementing remedial activities required under Federal, State of local authorities, or voluntary remediation activity.

Remediation material management unit means a tank, container, surface impoundment, oil/water separator, organic/water separator or transfer system used to manage remediation material.

Remediation material service means any time when a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system contains or contacts remediation material.

Responsible official means responsible official as defined in 40 CFR 70.2.

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emissions control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the

device threshold setting applicable to the air emissions control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

Separator means a remediation material management unit, generally a tank, used to separate oil or organics from water. A separator consists of not only the separation unit but also the forebay and other separator basins, skimmers, weirs, grit chambers, sludge hoppers, and bar screens that are located directly after the individual drain system and prior to any additional treatment units such as an air flotation unit clarifier or biological treatment unit. Examples of a separator include, but are not limited to, an API separator, parallel-plate interceptor, and corrugated-plate interceptor with the associated ancillary equipment.

Single-seal system means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

Sludge means sludge as defined in §260.10 of this

chapter.

Soil means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles (sizes as classified by the U.S. Soil Conservation Service), or a mixture of such materials with liquids, sludges, or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil.

Solvent extraction means an operation or method of separation in which a solid or solution is contacted with a liquid solvent (the two being mutually insoluble) to preferentially dissolve and transfer one or more components into the solvent.

Stabilization process means any physical or chemical process used to either reduce the mobility of contaminants in media or eliminate free liquids as determined by Test Method 9095 - Paint Filter Liquids Test in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992. (As an alternative, you may use any more recent, updated version of Method 9095 approved by

the EPA). A stabilization process includes mixing remediation material with binders or other materials, and curing the resulting remediation material and binder mixture. Other synonymous terms used to refer to this process are fixation or solidification. A stabilization process does not include the adding of absorbent materials to the surface of remediation material, without mixing, agitation, or subsequent curing, to absorb free liquid.

Surface impoundment means a unit that is a natural topographical depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquids. Examples of surface impoundments include holding, storage, settling, and aeration pits, ponds, and lagoons.

Tank means a stationary unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support and is designed to hold an accumulation of liquids or other materials.

Temperature monitoring device means a piece of equipment used to monitor temperature and having an

accuracy of ±1 percent of the temperature being monitored expressed in degrees Celsius (EC) or ±1.2 degrees EC, whichever value is greater.

Transfer system means a stationary system for which the predominant function is to convey liquids or solid materials from one point to another point within waste management operation or recovery operation. For the purpose of this subpart, the conveyance of material using a container (as defined of this subpart) or self-propelled vehicle (e.g., a front-end loader) is not a transfer system. Examples of a transfer system include but are not limited to a pipeline, an individual drain system, a gravity-operated conveyor (such as a chute), and a mechanically-powered conveyor (such as a belt or screw conveyor).

Treatment process means a process in which remediation material is physically, chemically, thermally, or biologically treated to destroy, degrade, or remove hazardous air pollutants contained in the material. A treatment process can be composed of a single unit (e.g., a steam stripper) or a series of units (e.g., a wastewater treatment system). A treatment process can be used to treat one or more remediation material streams at

the same time.

Vapor-mounted seal means a continuous seal that is mounted such that there is a vapor space between the liquid in the unit and the bottom of the seal.

Volatile organic hazardous air pollutant concentration or VOHAP concentration means the fraction by weight of the HAP listed in Table 1 of this subpart that are contained in the remediation material as measured using Method 305, 40 CFR part 63, appendix A and expressed in terms of parts per million (ppm). As an alternative to using Method 305, 40 CFR part 63, appendix A, you may determine the HAP concentration of the remediation material using any one of the other test methods specified in §63.694(b)(2)(ii). When a test method specified in §63.694(b)(2)(ii) other than Method 305 in appendix A of this part is used to determine the speciated HAP concentration of the contaminated material, the individual compound concentration may be adjusted by the corresponding f_{m305} listed in Table 1 of this subpart to determine a VOHAP concentration.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h)

of the CAA.

Table 1 to Subpart GGGGG of Part 63--Hazardous Air Pollutants

As stated in §§63.7882 (c)(1)(i) and (ii), (c)(2), (c)(3)(i) through (iii); 63.7912(a)(3)(ii), (g)(3)(ii), (h); and 63.7942; you must use the information in the following table to determine the total annual HAP quantity in the extracted remediation material at the facility:

CAS No.[a]	Compound Name	$f_{m\ 305}$
75070	Acetaldehyde	1.000
75058	Acetonitrile	0.989
98862	Acetophenone	0.314
107028	Acrolein	1.000
107131	Acrylonitrile	0.999
107051	Allyl chloride	1.000
71432	Benzene (includes benzene in gasoline)	1.000
98077	Benzotrichloride (isomers and mixture)	0.958
100447	Benzyl chloride	1.000
92524	Biphenyl	0.864
542881	Bis(chloromethyl)ether[b]	0.999
75252	Bromoform	0.998
106990	1,3-Butadiene	1.000
75150	Carbon disulfide	1.000
56235	Carbon Tetrachloride	1.000
43581	Carbonyl sulfide	1.000
133904	Chloramben	0.633
108907	Chlorobenzene	1.000

67663	Chloroform	1.000
107302	Chloromethyl methyl ether[b]	1.000
126998	Chloroprene	1.000
98828	Cumene	1.000
94757	2,4-D, salts and esters	0.167
334883	Diazomethane[c]	0.999
132649	Dibenzofurans	0.967
96128	1,2-Dibromo-3-chloropropane	1.000
106467	1,4-Dichlorobenzene(p)	1.000
107062	Dichloroethane (Ethylene dichloride)	1.000
111444	Dichloroethyl ether (Bis(2-chloroethyl ether)	0.757
542756	1,3-Dichloropropene	1.000
79447	Dimethyl carbamoyl chloride[c]	0.150
57147	1,1-Dimethyl hydrazine	
64675	Diethyl sulfate	0.0025
77781	Dimethyl sulfate	0.086
121697	N,N-Dimethylaniline	0.0008
51285	2,4-Dinitrophenol	0.0077
121142	2,4-Dinitrotoluene	0.0848
123911	1,4-Dioxane (1,4-Diethyleneoxide)	0.869
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	0.939
106887	1,2-Epoxybutane	1.000
140885	Ethyl acrylate	1.000
100414	Ethyl benzene	1.000
75003	Ethyl chloride (Chloroethane)	1.000
106934	Ethylene dibromide (Dibromoethane)	0.999

107062	Ethylene dichloride (1,2-Dichloroethane)	1.000
151564	Ethylene imine (Aziridine)	0.867
75218	Ethylene oxide	1.000
75343	Ethylidene dichloride (1,1-Dichloroethane)	1.000
	Glycol ethers[d] that have a Henry's Law constant value equal to or greater than 0.1 Y/X(1.8×10^{-6} atm/gm-mole/m^3) at 25°C	[e]
118741	Hexachlorobenzene	0.97
87683	Hexachlorobutadiene	0.88
67721	Hexachloroethane	0.499
110543	Hexane	1.000
78591	Isophorone	0.506
58899	Lindane (all isomers)	1.000
67561	Methanol	0.855
74839	Methyl bromide (Bromomethane)	1.000
74873	Methyl chloride (Choromethane)	1.000
71556	Methyl chloroform (1,1,1-Trichloroethane)	1.000
78933	Methyl ethyl ketone (2-Butanone)	0.990
74884	Methyl iodide (Iodomethane)	1.000
108101	Methyl isobutyl ketone (Hexone)	0.979
624839	Methyl isocyanate	1.000
80626	Methyl methacrylate	0.999
1634044	Methyl tert butyl ether	1.000
75092	Methylene chloride (Dichloromethane)	1.000

91203	Naphthalene	0.994
98953	Nitrobenzene	0.394
79469	2-Nitropropane	0.989
82688	Pentachloronitrobenzene (Quintobenzene)	0.839
87865	Pentachlorophenol	0.0898
75445	Phosgene[c]	1.000
123386	Propionaldehyde	0.999
78875	Propylene dichloride (1,2-Dichloropropane)	1.000
75569	Propylene oxide	1.000
75558	1,2-Propylenimine (2-Methyl aziridine)	0.945
100425	Styrene	1.000
96093	Styrene oxide	0.830
79345	1,1,2,2-Tetrachloroethane	0.999
127184	Tetrachloroethylene (Perchloroethylene)	1.000
108883	Toluene	1.000
95534	o-Toluidine	0.152
120821	1,2,4-Trichlorobenzene	1.000
71556	1,1,1-Trichloroethane (Methyl chlorform)	1.000
79005	1,1,2-Trichloroethane (Vinyl trichloride)	1.000
79016	Trichloroethylene	1.000
95954	2,4,5-Trichlorophenol	0.108
88062	2,4,6-Trichlorophenol	0.132
121448	Triethylamine	1.000
540841	2,2,4-Trimethylpentane	1.000

108054	Vinyl acetate	1.000
593602	Vinyl bromide	1.000
75014	Vinyl chloride	1.000
75354	Vinylidene chloride (1,1-Dichloroethylene)	1.000
1330207	Xylenes (isomers and mixture)	1.000
95476	o-Xylenes	1.000
108383	m-Xylenes	1.000
106423	p-Xylenes	1.000

Notes:

$f_{m\ 305}$ = Fraction measure factor in Method 305, 40 CFR part 63, appendix A of this part.

[a] CAS numbers refer to the Chemical Abstracts Services registry number assigned to specific compounds, isomers, or mixtures of compounds.

b Denotes a HAP that hydrolyzes quickly in water, but the hydrolysis products are also HAP chemicals.

c Denotes a HAP that may react violently with water.

d Denotes a HAP that hydrolyzes slowly in water.

e The $f_{m\ 305}$ factors for some of the more common glycol ethers can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711,

Table 2 to Subpart GGGGG of Part 63--Emissions Limitations for Process Vent Affected Sources

As stated in §§63.7890(a) and 63.7912(e), (f)(1) through (4), (g)(1), and (k), you must meet each emissions limitation for process vent affected sources in the following table that applies to you:

For . . .	You must meet the following emissions limitation.
1. all new and existing affected source process vents associated with remediation activities	a. For each 24-hour period, reduce emissions of HAP, listed in Table 1 of this subpart, or TOC (minus methane and ethane) from all affected process vents by 95 weight-percent by venting emissions through a closed-vent system to any combination of control devices meeting the requirements of §63.693. Instead of achieving the performance specifications listed in §63.693(d) through (g), you must meet a performance level for each control device necessary to achieve the 95% control level for all process vents combined; or b) For each period specified, reduce emissions of TOC (minus methane and ethane) from all affected source process vents at the facility below 1.4 kg/h (3.0 lb/h) and b. 8 Mg/yr (3.1 tons/yr). Instead of achieving the performance specifications listed in §63.693(d) through (g), you must meet a performance level for each control device necessary to achieve the overall emissions rate limit for all process vents (whether controlled or uncontrolled) combined.

Table 3 to Subpart GGGGG of Part 63--Emissions Limitations for Remediation Material Management Unit Affected Sources

As stated in §§63.7890(b), 63.7912 (e) and (k), and 63.7942, you must meet each emissions limitation for remediation material management unit affected sources in the following table that applies to you:

For each ...	where...	Then you must ...
1. new and existing tank that is an affected source with a design capacity less than 38 cubic meters (m^3) (10,000 gallons)	a. the maximum HAP vapor pressure of the remediation material in the tank is less than 76.6 kilopascals (kPa) (11.1 psia)	i. for each 24-hour period, reduce emissions of HAP, listed in Table 1 of this subpart, or TOC (minus methane and ethane) by 95 weight-percent (or, for combustion devices, to an exhaust concentration of 20 parts per million by volume, on a dry basis, corrected to 3% oxygen) by venting emissions through a closed-vent system to any combination of control devices meeting the requirements of §63.693; or

		ii. comply with one of the work practice standards (control level 1 or 2) specified in Table 5, item 1 of this subpart.
2. new and existing tank that is an affected source with a design capacity greater than or equal to 38 m^3 and less than 151 m^3 (40,000 gallons)	the maximum HAP vapor pressure of the remediation material in the tank is less than 13.1 kPa (1.9 psia)	same as Table 3, items 1(a) of this subpart;
3. new and existing tank that is an affected source with a design capacity greater than or equal to 38 m^3 and less than 151 m^3 (40,000 gallons)	a. the maximum HAP vapor pressure of the remediation material in the tank is greater than or equal to 13.1 kPa (1.9 psia)	i. same as Table 3, item 1(a) of this subpart; or ii. comply with the work practice standards (for control level 2) specified in Table 5, item 2 of this subpart.
4. new and existing tank that is an affected source with a design capacity greater than or equal to 151 m^3	the maximum HAP vapor pressure of the remediation material in the tank is less than 0.7 kPa (0.1 psia)	same as Table 3, items 1(a) of this subpart;

5. new and existing tank that is an affected source with a design capacity greater than or equal to 151 m^3	a. the maximum HAP vapor pressure of the remediation material in the tank is greater than or equal to 0.7 kPa (0.1 psia)	i. same as Table 3, item 1(a) of this subpart; or ii. comply with the work practice standards (for control level 2) specified in Table 5, item 2 of this subpart.
6. new and existing container that is an affected source	a. the design capacity is greater than 0.1 m^3 (26 gallons) and less than or equal to 0.46 m^3 (119 gallons)	i. same as Table 3, item 1(a) of this subpart; or ii. comply with one of the work practice standards (control level 1, 2 or 3) specified in Table 5, items 3 or 4 of this subpart.
7. new and existing container that is an affected source	a. the design capacity is greater than 0.46 m^3 and the container is not in light-material service as defined in §63.7942	i. same as Table 3, item 1(a) of this subpart; or ii. comply with one of the work practice standards (control level 1, 2 or 3) specified in Table 5, item 3 or 4 of this subpart.

8. new and existing container that is an affected source	a. the design capacity is greater than 0.46 m^3 and the container is in light-material service as defined in §63.7942	i. same as Table 3, item 1(a) of this subpart; or ii. comply with one of the work practice standards (control level 2 or 3) specified in Table 5, item 4 or 5 of this subpart.
9. new and existing container that is an affected source	a. the design capacity is greater than 0.1 m^3 and the container is used for a stabilization process	i. comply with one of the following whenever the remediation material is exposed to the atmosphere: (1) the requirements of Table 3, item 1(a) of this subpart; or (2) the work practice standards (for control level 3) specified in Table 5, item 4 of this subpart
10. new and existing surface impoundment that is an affected source		i. same as Table 3, item 1(a) of this subpart; or ii. comply with one of the work practice standards specified in Table 5, items 6 or 7 of this subpart.

11. new and existing oil/water separator and organic/water separator	i. same as Table 3, item 1(a) of this subpart, or ii. comply with one of the work practice standards specified in Table 5, items 8 or 9 of this subpart.

Table 4 to Subpart GGGGG of Part 63--Operating Limits and Associated Work Practices for Control Devices

As stated in §§63.7890(c), 63.7912(d), 63.7914(b) and 63.7942, you must meet each operating limit in the following table that applies to you:

For . . .	You must . . .
1. each existing and each new affected source using a thermal incinerator to comply with an emissions limit in Table 2 and 3 of this subpart	a. maintain the daily average firebox temperature greater than or equal to the temperature established during the design evaluation or performance test. b. maintain the daily average total organic or HAP concentration at the outlet less than or equal to the concentration established during the performance test (applies for CEMS only).

2. each existing and each new affected source using a catalytic incinerator to comply with an emissions limit in Table 2 and 3 of this subpart	a. replace the existing catalyst bed with a bed that meets the replacement specifications established during the design evaluation or performance test before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test; and b. maintain the daily average temperature at the inlet of the catalyst bed greater than or equal to the temperature established during the design evaluation or performance test. c. maintain the daily average total organic or HAP concentration at the outlet less than or equal to the concentration established during the performance test (applies for CEMS only).

3. each existing and each new affected source using a condenser to comply with an emissions limit in Table 2 and 3 of this subpart	a. maintain the daily average condenser exit temperature less than or equal to the temperature established during the design evaluation or performance test. b. maintain the daily average total organic or HAP concentration at the outlet less than or equal to the concentration established during the performance test (applies for CEMS only).
4. each existing and each new affected source using a carbon adsorption system with adsorbent regeneration to comply with an emissions limit in Table 2 and 3 of this subpart	a. replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test in accordance with §63.693(d)(2) through (4); and b. maintain the frequency of regeneration greater than or equal to the frequency established during the design evaluation or performance test in accordance with §63.693(d)(2) through (4); and

c. maintain the 1-hour average total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the stream mass flow established during the design evaluation or performance test in accordance with §63.693(d)(2) through (4); and

d. maintain the 1-hour average temperature of the adsorption bed during regeneration (except during the cooling cycle) greater than or equal to the temperature established during the design evaluation or performance test in accordance with §63.693(d)(2) through (4); and

e. maintain the 1-hour average temperature of the adsorption bed after regeneration (and within 15 minutes after completing any cooling cycle) less than or equal to the temperature established during the design evaluation or performance test in accordance with §63.693(d)(2) through (4).

	f. maintain the daily average total organic or HAP concentration at the outlet less than or equal to the concentration established during the performance test in accordance with §63.693(d)(2) (applies for CEMS only).
5. each existing and each new affected source using a carbon adsorption system without adsorbent regeneration to comply with an emissions limit in Table 2 and 3 of this subpart	a. replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test in accordance with §63.693(d)(2); and b. maintain the 1-hour average temperature of the adsorption bed less than or equal to the temperature established during the design evaluation or performance test in accordance with §63.693(d)(2). c. maintain the daily average total organic or HAP concentration at the outlet less than or equal to the concentration established during the performance test (applies for CEMS only).

6. each existing and each new affected source using a boiler or process heater to comply with an emissions limit in Table 2 and 3 of this subpart.	a. Maintain the daily average firebox temperature within the operating level established during the performance test. b. maintain the daily average total organic or HAP concentration at the outlet less than or equal to the concentration established during the performance test (applies for CEMS only).
7. each existing and each new affected source using a flare to comply with an emissions limit in Table 2 and 3 of this subpart	a. operate the flare at all times when emissions may be vented to it and with no visible emissions in accordance with §63.11(b)(4); and b. maintain the presence of a flame at all times in accordance with §63.11(b)(5); and c. meet the heat content specification in §63.11(b)(6)(ii) and the maximum tip velocity specifications in §63.11(b)(8) or (7), or meet the requirements in §63.11(b)(6)(i). d. maintain the daily average total organic or HAP concentration at the outlet less than or equal to the concentration established during the performance test (applies for CEMS only).

Table 5 to Subpart GGGGG of Part 63--Work Practice Standards

As stated in §63.7890(d), you must meet each work practice standard in the following table that applies to you:

For each . . .	You must . . .
1. new or existing tank that is an affected source meeting any set of capacity and vapor pressure limits specified in Table 3, items 1, 2 or 4 of this subpart	a. as an alternative to the emissions limit in Table 3 of this subpart, comply with the requirements of subpart OO (control level 1) of this part; OR b. comply with the requirements of §63.685(d) (control level 2) of this part.
2. new or existing tank that is an affected source meeting any set of capacity and vapor pressure limits specified in Table 3, items 3 or 5 of this subpart	as an alternative to the emissions limit in Table 3 of this subpart, comply with the requirements of §63.685(d) (control level 2) of this part.
3. new or existing container that is an affected source {meeting any set of capacity limits specified in Table 3, items 6 or 7 of this subpart} that is not vented to a control device	a. as an alternative to the emissions limit in Table 3 of this subpart, comply with the requirements of §63.922 (control level 1); OR b. comply with the requirements of §63.923 (control level 2).

4. new or existing container that is an affected source {meeting any set of capacity limits specified in Table 3, items 6, 7, 8 or 9 of this subpart} that is vented to a control device	as an alternative to the emissions limit in Table 3 of this subpart, comply with the requirements of §63.924 (control level 3).
5. new or existing container that is an affected source {meeting the capacity limits specified in Table 3, item 8 of this subpart} that is not vented to a control device	as an alternative to the emissions limit in Table 3 of this subpart, comply with the requirements of §63.923 (control level 2).
6. new or existing surface impoundment that is an affected source that is not vented to a control device	install a floating membrane cover designed to meet specifications in §63.942(a) through (c). The membrane must float on the surface at all times during normal operations.
7. new or existing surface impoundment that is an affected source that is vented through a closed vent system to a control device	a. install a cover meeting the requirements in §63.943(b) and (c); and b. design and operate the closed vent system in accordance with the requirements of §63.693.
8. new and existing oil/water separator, or organic/water separator that is an affected source that is not vented to a control device	follow the requirements of §§63.1042 (fixed roof), 63.1043 (floating roof), or 63.1045 (pressurized roof), as appropriate.

9. new and existing oil/water separator, or organic/water separator that is an affected source that <u>is</u> vented through a closed vent system to a control device	a. follow the requirements of §63.1044; and b. design and operate the closed vent system in accordance with the requirements of §63.693.
10. new and existing equipment component that is an affected source	comply with the requirements of subpart TT (control level 1); or subpart WW (control level 2).
11. new and existing transfer system that is an affected source	a. For individual drain systems, as defined in this subpart, comply with the requirements of subpart RR; and b. for transfer systems, other than individual drain systems, comply with the requirements of §63.689(c).

Table 6 to Subpart GGGGG of Part 63--Requirements for Performance Tests

As stated in §§63.7911(a), 63.7912(b) and (c), 63.7914(b), and 63.7930(e)(2), you must conduct the performance testing required in the following table at any time the EPA requires for non-flare control devices in accordance with section 114 of the CAA:

For . . .	You must. . .	Using . . .	According to the following requirements . . .

1. new and existing affected source process vents, tanks, containers, surface impoundments, oil/water separators, and organic/water separators complying with a HAP or TOC reduction efficiency limit in Table 2 or 3 of this subpart, an emissions rate limit in Table 2 of this subpart, or an emissions concentration limit in Table 3 of this subpart	select sampling port locations and the number of traverse points	Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	Sampling sites must be located at the inlet (if emissions reduction or destruction efficiency testing is required) and outlet of the control device and prior to any releases to the atmosphere.

2. new and existing affected source process vents, tanks, containers, surface impoundments, oil/water separators, and organic/water separators complying with a HAP or TOC reduction efficiency limit in Table 2 or 3 of this subpart or an emissions rate limit in Table 2 of this subpart	determine velocity and volumetric flow rate	Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A to part 60 of this chapter	For HAP or TOC reduction efficiency or emissions rate testing; not necessary for determining compliance with 20 ppmv concentration limit.

3. new and existing affected source process vents, tanks, containers, surface impoundments, oil/water separators, and organic/water separators complying with a HAP or TOC reduction efficiency limit in Table 2 or 3 of this subpart or an emissions rate limit in Table 2 of this subpart	conduct gas molecular weight analysis	Method 3, 3A, or 3B in appendix A to part 60 of this chapter	For flow rate determination only.

4. new and existing affected source process vents, tanks, containers, surface impoundments, oil/water separators, and organic/water separators complying with an emissions concentration limit in Table 3 of this subpart	measure O_2 concentration	Method 3A or 3B in appendix A to part 60 of this chapter	For correcting HAP and TOC concentrations measured from combustion control device to 3% O_2 for comparing to 20 ppmv concentration limit. See §63.7912(f)(4).

5. new and existing affected source process vents, tanks, containers, surface impoundments, oil/water separators, and organic/water separators complying with a HAP or TOC reduction efficiency limit in Table 2 or 3 of this subpart, an emissions rate limit in Table 2 of this subpart, or an emissions concentration limit in Table 3 of this subpart	measure moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter.	For flow rate determination and correction to dry basis.

6. new and existing affected source process vents, tanks, containers, surface impoundments, oil/water separators,and organic water separ complying with a HAP or TOC reduction efficiency limit in Table 2 or 3 of this subpart	a. measure organic HAP concentration at inlet and outlet locations	i. Method 18 in appendix A to part 60 of this chapter.

b. measure TOC concentration at inlet and outlet locations	i. Method 18 in appendix A to part 60 of this chapter, or ii. Method 25A in appendix A to part 60 of this chapter, or iii. Method 25 in appendix A to part 60 of this chapter.	(1) the organic HAP used for the calibration gas for Method 25A must be the single organic HAP representing the largest percent by volume of emissions; and (2) during the performance test or a design evaluation, you must establish the operating parameter limits within which total organic HAP emissions are reduced by 95 weight-percent (or to the level necessary to meet the emissions rate limits in Table 2 of this subpart) or to 20 ppmv exhaust concentration.

7. all affected source process vents associated with remediation activities complying with the emissions rate limit in row (1)(b) of Table 2 of this subpart	measure organic HAP at the outlet location	Method 18 in appendix A to part 60 of this chapter.
8. new and existing affected source tanks, containers, surface impoundments, oil/water separators, and organic/water separators complying with the HAP or TOC emissions concentration limit in Table 3 of this subpart	a. measure organic HAP at the outlet location	i. Method 18 in appendix A to part 60 of this chapter.
	b. measure TOC at the outlet location	i. Method 18 in appendix A to part 60 of this chapter, or ii. Method 25A in appendix A to part 60 of this chapter.

Table 7 to Subpart GGGGG of Part 63--Initial Compliance With Emissions Limitations

Use the following table to determine if you have demonstrated initial compliance for each affected source in Table 2 or 3 of this subpart and for process vents in Table 2 of this subpart:

For . . .	For the following emissions limitation . . .	You have demonstrated initial compliance if . . .
1. each affected source listed in Table 2 or 3 of this subpart	reduce total organic HAP, listed in Table 1 of this subpart, or TOC emissions by at least 95 weight-percent,	total organic HAP, listed in Table 1 of this subpart, or TOC emissions, based on the results of the performance testing specified in Table 6 of this subpart, are reduced by at least 95 weight-percent; and you have a record of the operating requirement(s) listed in Table 4 of this subpart for the process unit over the performance test during which emissions did not exceed 95 weight-percent.

2. each affected source listed in Table 3 of this subpart	limit emissions of total HAP, listed in Table 1 of this subpart, or TOC concentration to #20 ppmv	the average total HAP, listed in Table 1 of this subpart, or TOC emissions, measured using the methods in Table 6 of this subpart over the 3-hour initial performance test, do not exceed 20 ppmv; and you have a record of the operating requirement(s) listed in Table 4 of this subpart for the process unit over the performance test during which emissions did not exceed 20 ppmv.
3. affected source process vents listed in Table 2 of this subpart	reduce total HAP, listed in Table 1 of this subpart, or TOC emissions below 1.4 kg/h (3.0 lb/hr) and 2.8 Mg/yr (3.1 ton/yr)	the average total HAP, listed in Table 1 of this subpart, or TOC emissions, measured using the methods in Table 6 of this subpart over the 3-hour initial performance test, do not exceed 1.4 kg/h (3.0 lb/hr); and you have a record of the operating requirement(s) listed in Table 4 of this subpart for the process unit(s) over the performance test during which emissions did not exceed 1.4 kg/h (3.0 lb/hr).

Table 8 to Subpart GGGGG of Part 63--Initial Compliance with Work Practice Standards

Use the following table to determine if you have demonstrated initial compliance for tanks; containers; surface impoundments; oil/water separators or organic/water separators; equipment; closed-vent systems; and transfer systems:

For each . . .	For the following work practice standard . . .	You have demonstrated initial compliance if . . .
1. Tank complying with the requirements of subpart OO (control level 1) of this part	install a fixed roof designed and operated in accordance with §63.902	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have installed a fixed roof that meets the specifications in §63.902, you have performed the initial inspection following installation of the roof in accordance with §63.906, and you have a record documenting the roof design and inspection results.

2. Tank complying with the requirements of §63.685(d) (control level 2) of this part	operate a fixed-roof tank with an internal floating roof (IFR) in accordance with §63.685(e)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have installed an IFR that meets the applicable specifications in §63.685(e), you have performed the initial inspection following installation of the IFR in accordance with §63.695(b)(1), and you have a record documenting the IFR design and inspection results.
3. Tank complying with the requirements of §63.685(d) (control level 2) of this part	install an external floating roof (EFR) designed and operated in accordance with §63.685(f)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have installed an EFR that meets the applicable specifications in §63.685(f), you have performed the initial inspection following installation of the EFR in accordance with §63.695(b)(2)(i), and you have a record documenting the EFR design and inspection results.

4. Tank complying with the requirements of §63.685(d) (control level 2) of this part	vent the tank to a control device in accordance with §63.685(g)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have installed a fixed roof that meets the applicable specifications in §63.685(g)(1) and (b), you have performed the initial inspection following installation of the fixed roof in accordance with §63.695(b)(3), and you have a record documenting the fixed roof design and inspection results.
5. Tank complying with the requirements of §63.685(d) (control level 2) of this part	use a pressure tank designed and operated in accordance with §63.685(h)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have designed a pressure tank meeting the applicable specifications in §63.685(h) and you have a record documenting the tank design.
6. Tank complying with the requirements of §63.685(d) (control level 2) of this part	a tank located inside an enclosure in accordance with §63.685(i)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that the enclosure meets the applicable specifications in §63.685(i), you have performed the initial inspection in accordance with §63.685(i)(1), and you have a record documenting the enclosure design and inspection results.

7. Container complying with §63.922 (level 1 controls)	install a cover meeting the requirements of §63.922 whenever remediation material is in the container	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that the cover meets §63.922 and you have visually inspected the container and its cover and closure devices for visible cracks, holes, gaps, or other open spaces within 24 hours after the material is placed in the container and maintain a record of the inspection.
8. Container complying with §63.923 (level 2 controls)	install a cover meeting the requirements of §63.923 and be installed whenever remediation material is in the container	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that the cover meets §63.923 and you have visually inspected the container and its cover and closure devices for visible cracks, holes, gaps, or other open spaces within 24 hours after the material is placed in the container and maintain a record of the inspection.

9. Container complying with §63.924 (level 3 controls)	vent the container through a closed-vent system (CVS) to a control device according to the specifications of §63.924(b)	you have met the work practice standard, and for containers vented inside an enclosure, as part of the Notification of Compliance Status, you submit a signed statement that, you meet the requirements of §63.924(c)(1). Note: see item number 17 of this table for work practice requirements for closed-vent systems.
10. Surface impoundment subject to §63.940 that is not vented to a control device	install a floating membrane cover designed in accordance with specifications in §63.942(a) through (c)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have installed a floating membrane cover that meets the specifications in §63.942(b), you have performed the initial inspection following installation of the cover in accordance with §63.946(a)(2), and you have a record documenting the cover design and inspection results.

11. Surface impoundment subject to §63.940 that is vented to a control device	install a cover designed in accordance with the specifications in §63.943(b)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have installed a cover that meets the specifications in §63.943(b), you have performed the initial inspection following installation of the cover as required by §63.946(b)(1)(ii), and you have a record documenting the cover design and inspection results.
12. Oil/water separator, or organic/water separator complying with §63.1042	install a fixed roof designed in accordance with the specifications in §63.1042(b)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have installed a fixed roof that meets the specifications in §63.1042(b), you have performed the initial inspection following installation of the fixed roof as required by §63.1047(a), and you have a record documenting the fixed roof design and inspection results.

13. Oil/water separator, or organic/water separator complying with §63.1043	install a floating roof designed in accordance with the specifications in §63.1043(b)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have installed a floating roof that meets the specifications in §63.1043(b), you have performed the initial inspection following installation of the floating roof as required by §63.1047(b), and you have a record documenting the floating roof design and inspection results.
14. Oil/water separator, or organic/water separator that is complying with §63.1044	install a fixed roof designed in accordance with the specifications in §63.1044(b) and vent headspace to a control device through a CVS	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have installed a fixed roof that meets the specifications in §63.1044(b), you have performed the initial inspection following installation of the fixed roof as required by §63.1047(c), and you have a record documenting the fixed roof design and inspection results.

15. Oil/water separator, or organic/water separator that is complying with §63.1045	operate the separator as a closed system in accordance with the specifications in §63.1045(b)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that the separator operates as a closed-system, you have performed the no detectable organic emissions test required in §63.1046, and you have a record documenting the separator design and test results.
16. Item of equipment	carry out a leak detection and repair program to comply with the requirements of subpart TT (control level 1); or subpart WW (control level 2).	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that equipment subject to the work practice requirements has been identified and you make available written specifications for the leak detection and repair program or equivalent control approach.
17. Closed-vent system (CVS) conveying emissions to a control device	design and operate the CVS in accordance with the specifications in §63.693	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that the CVS meets the specifications in §63.693(c) and you perform the initial inspection required by §63.695(c)(1)(i) and have a record documenting the design and inspection results.

18. Transfer system that is an individual drain system complying with the applicable requirements in subpart RR	meet the design and operating requirements in §63.962(a)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have designed the applicable controls in accordance with §63.962(a) and (b) and performed initial inspection requirements in §63.964(a)(1)(iv) and have a record documenting the design and inspection results. Systems conveying emissions through a CVS to a control device should meet the requirements in item 17 of this table.
19. Transfer system that is not an individual drain system and complies with the requirements in §63.689(c)	design and operate a transfer system using covers in accordance with §63.689(d)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have designed an installed the covers as required by §63.689(d)(1) through (5), performed the inspection requirements in §63.695(d)(2) and have a record documenting the design and inspection results.
20. Transfer system that is not an individual drain system and complies with the requirements in §63.689(c)	design and operate a transfer system using hard piping in accordance with §63.689(c)(2)	you have met the work practice standard and as part of the Notification of Compliance Status, you submit a signed statement that you have installed the hard piping as specified in §63.689(c)(2).

Table 9 to Subpart GGGGG of Part 63--Continuous Compliance with Emissions Limitations

Use the following table to determine if you have demonstrated continuous compliance for each unit in Table 2 or 3 of this subpart:

For . . .	For the following emissions limitation . . .	You have demonstrated continuous compliance by . . .

1. each unit listed in Table 2 or 3 of this subpart	a. reduce total organic HAP, listed in Table 1 of this subpart, or TOC emissions by at least 95 weight-percent,	i. performing CMS monitoring and collecting data according to §§63.7914, 63.7921, and 63.7930; and ii. maintaining the site-specific operating limits within the ranges established during the design evaluation or performance test; and iii. continuously monitoring and recording the total organic or HAP concentration at least every 15 minutes, reducing the CEMS data to 1-hour and then 24-hour block averages, and maintaining the 24-hour block average total organic or HAP concentration less than or equal to the concentration established during the performance test; and iv. keeping the applicable records required in §63.10.

2. each unit listed in Table 3 of this subpart	limit emissions of total HAP, listed in Table 1 of this subpart, or TOC concentration of #20 ppmv	same as item 1 of Table 9 of this subpart.
3. each unit listed in Table 2 or 3 of this subpart	limit emissions of total HAP, listed in Table 1 of this subpart, to below 1.4 kg/hr (3.0 lb/hr) and 2.8 Mg/yr (3.1 ton/yr)	same as item 1 of Table 9 of this subpart.

Table 10 to Subpart GGGGG of Part 63--Continuous Compliance with Operating Limits

Use the following table to determine if you have demonstrated continuous compliance for each affected source unit in Table 2 or 3 of this subpart:

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
1. affected source using a thermal oxidizer to comply with an emissions limit in Table 2 or 3 of this subpart	a. maintain the hourly average firebox temperature greater than or equal to the temperature established during the design evaluation or performance test	i. continuously monitoring and recording firebox temperature every 15 minutes and maintaining the hourly average firebox temperature greater than or equal to the temperature established during the design evaluation or performance test; and ii. keeping the applicable records required in §63.10.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
2. affected source using a catalytic oxidizer to comply with an emissions limit in Table 2 or 3 of this subpart	a. replace the existing catalyst bed with a catalyst bed that meets the replacement specifications established during the design evaluation or performance test before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test	i. replacing the existing catalyst bed with a catalyst bed that meets the replacement specifications established during the design evaluation or performance test before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test; and ii. keeping the applicable records required in §63.10.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
	b. maintain the hourly average temperature at the inlet of the catalyst bed greater than or equal to the temperature established during the design evaluation or performance test	i. continuously monitoring and recording the temperature at the inlet of the catalyst bed at least every 15 minutes and maintaining the hourly average temperature at the inlet of the catalyst bed greater than or equal to the temperature established during the design evacuation or performance test; and ii. keeping the applicable records required in §63.10.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
	c. maintain the hourly average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test	i. continuously monitoring and recording the temperature at the outlet of the catalyst bed every 15 minutes and maintaining the hourly average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test; and ii. keeping the applicable records required in §63.10.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
3. affected source using a condenser to comply with an emissions limit in Table 2 or 3 of this subpart	a. maintain the hourly average condenser exit temperature less than or equal to the temperature established during the design evaluation or performance test	i. continuously monitoring and recording the temperature at the exit of the condenser at least every 15 minutes and maintaining the hourly average condenser exit temperature less than or equal to the temperature established during the design evaluation or performance test; and ii. keeping the applicable records required in §63.10.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
4. affected source using an adsorption system with adsorbent regeneration to comply with an emissions limit in Table 2 or 3 of this subpart	a. replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test	i. replacing the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test; and ii. keeping the applicable records required in §63.10.
	b. maintain the frequency of regeneration greater than or equal to the frequency established during the design evaluation or performance test.	i. maintaining the frequency of regeneration greater than or equal to the frequency established during the design evaluation or performance test; and ii. keeping the applicable records required in §63.10.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
	c. maintain the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the stream mass flow established during the design evaluation or performance test	i. continuously monitoring and recording the total regeneration stream mass flow during the adsorption bed regeneration cycle and maintaining the flow greater than or equal to the stream mass flow established during the design evaluation or performance test; and ii. keeping the applicable records required in §63.10.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
	d. maintain the hourly temperature of the adsorption bed during regeneration (except during the cooling cycle) greater than or equal to the temperature established during the design evaluation or performance test	i. continuously monitoring and recording the hourly temperature of the adsorption bed during regeneration (except during the cooling cycle) and maintaining the hourly temperature greater than or equal to the temperature established during the design evaluation or performance test; and ii. keeping the applicable records required in §63.10.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
	e. maintain the hourly temperature of the adsorption bed after regeneration (and within 15 minutes after completing any cooling cycle) less than or equal to the temperature established during the design evaluation or performance test	i. continuously monitoring and recording the hourly temperature of the adsorption bed after regeneration (and within 15 minutes after completing any cooling cycle) and maintaining the hourly temperature less than or equal to the temperature established during the design evaluation or performance test; and ii. keeping the applicable records required in §63.10.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
5. affected source using an adsorption system without adsorbent regeneration to comply with an emissions limit in Table 2 or 3	a. replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test	i. replacing the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test; and ii. keeping the applicable records required in §63.10.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
	b. maintain the hourly temperature of the adsorption bed less than or equal to the temperature established during the design evaluation or performance test	i. continuously monitoring and recording the hourly temperature of the adsorption bed and maintaining an hourly temperature less than or equal to the temperature established during the design evaluation or performance test; and ii. keeping the applicable records required in §63.10.
6. affected source using a flare to comply with an emissions limit in Table 2 or 3 of this subpart	a. maintain a pilot flame present in the flare at all times that vapors are not being vented to the flare (§63.11(b)(5))	i. continuously operating a device that detects the presence of the pilot flame; and ii. keeping the applicable records required in §63.695(e).
	b. maintain a flare flame at all times that vapors are being vented from the emissions source (§63.11(b)(5))	i. maintaining a flare flame at all times that vapors are being vented from the emissions source; and ii. keeping the applicable records required in §63.10.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
	c. operate the flare with no visible emissions, except for up to 5 minutes in any 2 consecutive hours (§63.11(b)(4))	i. operating the flare with no visible emissions exceeding the amount allowed; and ii. keeping the applicable records required in §63.10
	d. operate the flare with an exit velocity that is within the applicable limits in §63.11(b)(6), (7), and (8)	i. operating the flare within the applicable exit velocity limits; and ii. keeping the applicable records required in §63.10.
	e. operate the flare with a net heating value of the gas being combusted greater than the applicable minimum value in §63.11(b)(6)(ii)	i. operating the flare with the gas net heating value within the applicable limit; and ii. keeping the applicable records required in §63.10.

Table 11 to Subpart GGGGG of Part 63--Continuous Compliance with Work Practice Standards

Use the requirements in the following table to demonstrate continuous compliance for tanks; containers; surface impoundments; oil/water separators or organic/water separators; equipment; closed-vent systems; and transfer systems:

For each . . .	For the following work practice standard . . .	You must demonstrate continuous compliance by . . .
1. Tank complying with subpart OO (control level 1) of this part	a. install a fixed roof designed and operated in accordance with the applicable specifications in §63.902	i. following the inspection and repair procedures in §63.906(a) and (b); and ii. keeping the records required in §63.907.
2. Tank complying with the requirements of §63.685(d) (control level 2) of this part	a. operate a fixed-roof tank with an internal floating roof (IFR) in accordance with §63.685(e)	i. following the inspection and repair requirements in §63.695(b)(1) and (4); and ii. keeping the records required in §63.696.
3. Tank complying with the requirements of §63.685(d) (control level 2) of this part	a. install an external floating roof (EFR) designed and operated in accordance with §63.685(f)	i. following the inspection and repair requirements in §63.695(b)(2) and (4); and ii. keeping the records required in §63.696(d).

4. Tank complying with the requirements of §63.685(d) (control level 2) of this part	a. vent the tank through a closed vent system (CVS) to a control device in accordance with §63.685(g)	i. following the inspection and repair requirements in §63.695(b)(3) and (4); and ii. following the inspection and monitoring requirements for the CVS in §63.695(c)(1)-(3); and iii. keeping the records required in §63.696(e).
5. Tank complying with the requirements of §63.685(d) (control level 2) of this part	use a pressure tank designed and operated in accordance with §63.685(h)	operating the pressure tank at all times in accordance with the specifications in §63.685(h).
6. Tank complying with the requirements of §63.685(d) (control level 2) of this part	a. a tank located inside an enclosure in accordance with §63.685(i)	i. meeting the recordkeeping requirements of §63.696(f); and ii. meeting the requirements for a closed-vent system specified in item 19 of this table.

7. Container complying with §63.922 (level 1 controls)	install a cover meeting the requirements of §63.922 whenever remediation material is in the container	following the inspection and repair requirements in §63.926(a)(2) and (3).
8. Container complying with §63.923 (level 2 controls)	install a cover meeting the requirements of §63.923 whenever remediation material is in the container	following the inspection and repair requirements in §63.926(c)(2) and (3).
9. Container complying with §63.924 (level 3 controls)	a. vent the container through a closed-vent system (CVS) to a control device according to the specifications of §63.924(b)	i. following the inspection and monitoring requirements for the CVS in §63.695(c)(1)-(3); and ii. keeping the records required in §63.927.

10. Surface impoundment complying with the applicable requirements in subpart QQ that is not vented to a control device	install a floating membrane cover designed according to the specifications in §63.942(a)-(b) and maintain the membrane floating on the liquid surface at all times	maintaining the membrane floating on the liquid surface and visually inspecting the membrane at least once every year, making a first attempt at repair of any defects within 5 calendar days of detection, completing repair within 45 calendar days of detection, and keeping the records required in §63.947(a)
11. Surface impoundment that is a new or existing affected source subject to subpart QQ that is vented to a control device	install a cover designed to meet the applicable specifications in §63.943(b); and vent the emissions through a closed-vent system (CVS) to a control device	maintaining a cover on the surface impoundment in accordance with the specifications in §63.943(c), visually inspecting the cover in accordance with §63.946(b), repairing any defects as specified in §63.946(c), and keeping a record of the inspection as required in §63.947; Note: see item no.19 in this Table for CVS requirements.

12. Oil/water separator, or organic/water separator complying with §63.1042	install a fixed roof designed to meet specifications in §63.1042(b)	performing the inspection required by §63.1047(a) once every calendar year, and maintaining the records required by §63.1048
13. Oil/water separator, or organic/water separator complying with §63.1043	install a floating roof designed to meet specifications in §63.1043(b)	performing the inspections required by §63.1047(b), and maintaining the records required by §63.1048.
14. Oil/water separator, or organic/water separator that is complying with §63.1044	install a fixed roof designed to meet the specifications in §63.1044(b) and vent headspace to a control device through a CVS	performing a visual inspection of the fixed roof at least once every calendar year under §63.1047(c)(1)(ii), operating, inspecting and monitoring the CVS in accordance with the requirements in §63.693, and keeping the records required by §63.1048.
15. Oil/water separator, or organic/water separator that is complying with §63.1045	operate the separator as a closed system in accordance with the specifications in §63.1045(b)	operating the separator as a closed-system and performing the no detectable organic emissions test required by §63.1046.

16. Piece of equipment complying with either subpart TT or WW of this part	carry out a leak detection and repair program complying with the requirements of subpart TT (control level 1) or subpart WW (control level 2).	meeting the monitoring, repair and recordkeeping requirements of either subpart TT or subpart WW.
17. Affected source conveying emissions to a control device using a closed-vent system (CVS)	a. design and operate the CVS in accordance with the specifications in §63.693	i. following the inspection, repair and monitoring requirements in §63.695(c)(1) through (3); and ii. keeping the records required by §63.696(a). For the purposes of this subpart, the term “Table 2 of this subpart” in 40 CFR Part 63 Subpart DD means “Table 13".

18. Transfer system that is an individual drain system complying with the applicable requirements in subpart RR	a. meet the design and operating requirements in §63.962(a)	i. following the operating requirements in §63.962(b), the inspection and repair requirements in §63.964(a)and (b); and ii. keeping the records required by §63.965(a). iii. systems conveying emissions through a CVS to a control device should meet the requirements in item 19 of this table.
19. Transfer system that is not an individual drain system and complies with the requirements in §63.689(c)	a. transfer system using covers in accordance with §63.689(d)	i. following the operating requirements in §63.689(d)(5) and the inspection and repair requirements in §63.695(d); and ii. keeping the records required by §63.696.

Table 12 to Subpart GGGGG of Part 63--Requirements for Reports

Use the following table to determine which reports to submit:

You must submit a(n)	The report must contain...	You must submit the report...

compliance report	a statement that there were no deviations from the emissions limitations and work practice standards during the reporting period if there are no deviations from any emissions limitations (emissions limit, operating limit, opacity limit, and visible emissions limit) that applies to you, and there are no deviations from the requirements for work practice standards in Table 11 of this subpart that apply to you. If there were no periods during which the CMS, including CEMS, COMS, and operating parameter monitoring systems, was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during the which the CMS was out-of-control during the reporting period; and the information in §63.7931(c) and (d) if you have a deviation from any emissions limitation (emissions limit, operating limit, opacity limit, and visible emissions limit) or work practice	semiannually according to the requirements in §63.7931(b).

immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan	actions taken for the event	by fax or telephone within 2 working days after starting actions inconsistent with the plan.
	the information in §63.10(d)(5)(ii)	by letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.

Table 13 to Subpart GGGGG of Part 63--Applicability of General Provisions to Subpart GGGGG

As stated in §63.7940, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Brief Description	Applies to Subpart GGGGG
§63.1	Applicability	Initial Applicability Determination; Applicability After Standard Established; Permit Requirements; Extensions, Notifications	Yes
§63.2	Definitions	Definitions for part 63 standards	Yes
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes
§63.4	Prohibited Activities	Prohibited Activities; Compliance date; Circumvention, Severability	Yes
§63.5	Construction/ Reconstruction	Applicability; applications; approvals	Yes
§63.6(a)	Applicability	GP apply unless compliance extension GP apply to area sources that become major	Yes

§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for 112(f)	Yes
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	Yes
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in subpart, which must be no later than 3 years after effective date For 112(f) standards, comply within 90 days of effective date unless compliance extension	Yes
§63.6(c)(3)-(4)	[Reserved]		

§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years)	Yes
§63.6(d)	[Reserved]		
§63.6(e)(1)-(2)	Operation & Maintenance	Operate to minimize emissions at all times Correct malfunctions as soon as practicable Operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met	Yes
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan (SSMP)	Requirement for SSM and startup, shutdown, malfunction plan Content of SSMP	Yes
§63.6(f)(1)	Compliance Except During SSM	You must comply with emissions standards at all times except during SSM	Yes

§63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes
§63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes
§63.6(h)	Opacity/Visible Emissions (VE) Standards	Requirements for opacity and visible emissions limits	Yes. However, there are no opacity standards.
§63.6(h)(1)	Compliance with Opacity/VE Standards	You must comply with opacity/VE emissions limitations at all times except during SSM	Yes. However, there are no opacity standards.
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not state test method, use Method 9 for opacity and Method 22 for VE	Yes. However, there are no opacity standards.
§63.6(h)(2)(ii)	[Reserved]		
§63.6(h)(2)(iii)	Using Previous Tests to Demonstrate Compliance with Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this rule	Yes. However, there are no opacity standards.

§63.6(h)(3)	[Reserved]		
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	Yes. However, there are no opacity standards.
§63.6(h)(5)(i), (iii)-(v)	Conducting Opacity/VE Observations	Dates and Schedule for conducting opacity/VE observations	Yes. However, there are no opacity standards.
§63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with thirty, 6-minute averages.	No.
§63.6(h)(6)	Records of Conditions During Opacity/VE observations	Must keep records available and allow Administrator to inspect.	Yes. However, there are no opacity standards.
§63.6(h)(7)(i)	Report COMS Monitoring Data from Performance Test	Must submit COMS data with other performance test data	No
§63.6(h)(7)(ii)	Using COMS instead of Method 9	Can submit COMS data instead of Method 9 results even if rule requires Method 9, but must notify Administrator before performance test.	No

§63.6(h)(7)(iii)	Averaging time for COMS during performance test	To determine compliance, must reduce COMS data to 6-minute averages	No
§63.6(h)(7)(iv)	COMS requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to §§63.8(e), COMS are properly maintained and operated according to 63.8(c) and data quality as §63.8(d).	No
§63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probative but not conclusive evidence of compliance with opacity standard, even if Method 9 observation shows otherwise. Requirements for COMS to be probative evidence–proper maintenance, meeting PS 1, and data have not been altered.	Yes. However, there are no opacity standards.
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, Method 9, and Method 22 results, as well as information about operation and maintenance to determine compliance.	Yes. However, there are no opacity standards.

§63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No
§63.6(i)(1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes
§63.6(j)	Presidential Compliance Exemption	President may exempt source category from requirement to comply with rule.	Yes
§63.7(a)(1)-(2)	Performance Test Dates	Dates for Conducting Initial Performance Testing and Other Compliance Demonstrations. Must conduct 180 days after first subject to rule.	Yes
§63.7(a)(3)	Section 114 Authority	Administrator may require a performance test under CAA Section 114 at any time.	Yes
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test.	Yes
§63.7(b)(2)	Notification of Rescheduling	If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date.	Yes

§63.7(c)	Quality Assurance/ Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: Test plan approval procedures Performance audit requirements Internal and External QA procedures for testing	Yes
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes
§63.7(e)(1)	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative conditions. Cannot conduct performance tests during SSM. Not a violation to exceed standard during SSM.	Yes
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to rule and EPA test methods unless Administrator approves alternative.	Yes

§63.7(e)(3)	Test Run Duration	Must have three test runs of at least one hour each. Compliance is based on arithmetic mean of three runs. Conditions when data from an additional test run can be used.	Yes
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an alternative test method.	Yes
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report. Must submit performance test data 60 days after end of test with the Notification of Compliance Status. Keep data for 5 years.	Yes
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes

§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of part 60 apply	Yes
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring with Flares	Unless your rule says otherwise, the requirements for flares in 63.11 apply.	Yes
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative.	Yes
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems Must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise. If more than one monitoring system on an emissions point, must report all monitoring system results, unless one monitoring system is a backup.	Yes

§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices.	Yes
§63.8(c)(1)(i)	Routine and Predictable SSM	Follow the SSM plan for routine repairs. Keep parts for routine repairs readily available. Reporting requirements for SSM when action is described in SSM plan.	Yes
§63.8(c)(1)(ii)	SSM not in SSMP	Reporting requirements for SSM when action is not described in SSM plan.	Yes
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	How Administrator determines if source complying with operation and maintenance requirements. Review of source O&M procedures, records, Manufacturer’s instructions, recommendations, and inspection of monitoring system	Yes

§63.8(c)(2)-(3)	Monitoring System Installation	Must install to get representative emissions and parameter measurements. Must verify operational status before or at performance test.	Yes
§63.8(c)(4)	Continuous Monitoring System (CMS) Requirements	CMS must be operating except during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts.	No
§63.8(c)(4)(i)-(ii)	Continuous Monitoring System (CMS) Requirements	COMS must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period. CEMS must have a minimum of one cycle of operation for each successive 15-minute period.	Yes. However, COMS are not applicable. Requirements for CPMS are listed in §§63.7900 and 63.7913.
§63.8(c)(5)	COMS Minimum Procedures	COMS minimum procedures	No

§63.8(c)(6)	CMS Requirements	Zero and High level calibration check requirements	Yes. However requirements for CPMS are addressed in §§63.7900 and 63.7913.
§63.8(c)(7)-(8)	CMS Requirements	Out-of-control periods, including reporting	Yes
§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc. Must keep quality control plan on record for 5 years. Keep old versions for 5 years after revisions.	Yes
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	Yes
§63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for CEMS	No

§63.8(g)(1)-(4)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points. CEMS 1-hour averages computed over at least 4 equally spaced data points.	Yes. However, COMS are not applicable. Requirements for CPMS are addressed in §§63.7900 and 63.7913.
§63.8(g)(5)	Data Reduction	Data that can't be used in computing averages for CEMS and COMS.	No
§63.9(a)	Notification Requirements	Applicability and State Delegation	Yes
§63.9(b)(1)-(5)	Initial Notifications	Submit notification 120 days after effective date. Notification of intent to construct/ reconstruct; Notification of commencement of construct/ reconstruct; Notification of startup Contents of each	Yes
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed BACT/LAER	Yes

§63.9(d)	Notification of Special Compliance Requirements for New Source	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No
§63.9(g)	Additional Notifications When Using CMS	Notification of performance evaluation Notification using COMS data Notification that exceeded criterion for relative accuracy	Yes. However, there are no opacity standards.
§63.9(h)(1)-(6)	Notification of Compliance Status	Contents Due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after. When to submit to Federal vs. State authority	Yes

§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted	Yes
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes
§63.10(a)	Recordkeeping/ Reporting	Applies to all, unless compliance extension When to submit to Federal vs. State authority Procedures for owners of more than 1 source	Yes
§63.10(b)(1)	Recordkeeping/ Reporting	General Requirements Keep all records readily available Keep for 5 years	Yes
§63.10(b)(2)(i)-(iv)	Records related to Startup, Shutdown, and Malfunction	Occurrence of each of operation (process equipment) Occurrence of each malfunction of air pollution equipment Maintenance on air pollution control equipment Actions during startup, shutdown, and malfunction	Yes

§63.10(b)(2)(vi) and (x-xi)	CMS Records	Malfunctions, inoperative, out-of-control Calibration checks Adjustments, maintenance	Yes
§63.10(b)(2)(vii)-(ix)	Records	Measurements to demonstrate compliance with emissions limitations Performance test, performance evaluation, and visible emissions observation results Measurements to determine conditions of performance tests and performance evaluations.	Yes
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	No
§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes
§63.10(b)(3)	Records	Applicability Determinations	Yes

§63.10(c)	Records	Additional Records for CMS	No
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	Contents and submission	Yes
§63.10(e)(1)-(2)	Additional CMS Reports	Must report results for each CEM on a unit Written copy of performance evaluation 3 copies of COMS performance evaluation	Yes. However, COMS are not applicable
§63.10(e)(3)	Reports	Excess Emissions Reports	No

§63.10(e)(3)(i-iii)	Reports	Schedule for reporting excess emissions and parameter monitor exceedance (now defined as deviations)	No
§63.10(e)(3)(iv-v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedance (now defined as deviations) Provision to request semiannual reporting after compliance for one year Submit report by 30th day following end of quarter or calendar half If there has not been an exceedance or excess emissions (now defined as deviations), report contents is a statement that there have been no deviations	No
§63.10(e)(3)(iv-v)	Excess Emissions Reports	Must submit report containing all of the information in §63.10(c)(5-13), §63.8(c)(7-8)	No

§63.10(e)(3)(vi-viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMSs (now called deviations) Requires all of the information in §63.10(c)(5-13), §63.8(c)(7-8)	No
§63.10(e)(4)	Reporting COMS data	Must submit COMS data with performance test data	No
§63.10(f)	Waiver for Recordkeeping/ Reporting	Procedures for Administrator to waive	Yes
§63.11	Flares	Requirements for flares	Yes
§63.12	Delegation	State authority to enforce standards	Yes
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes
§63.14	Incorporation by Reference	Test methods incorporated by reference	Yes
§63.15	Availability of Information	Public and confidential information	Yes